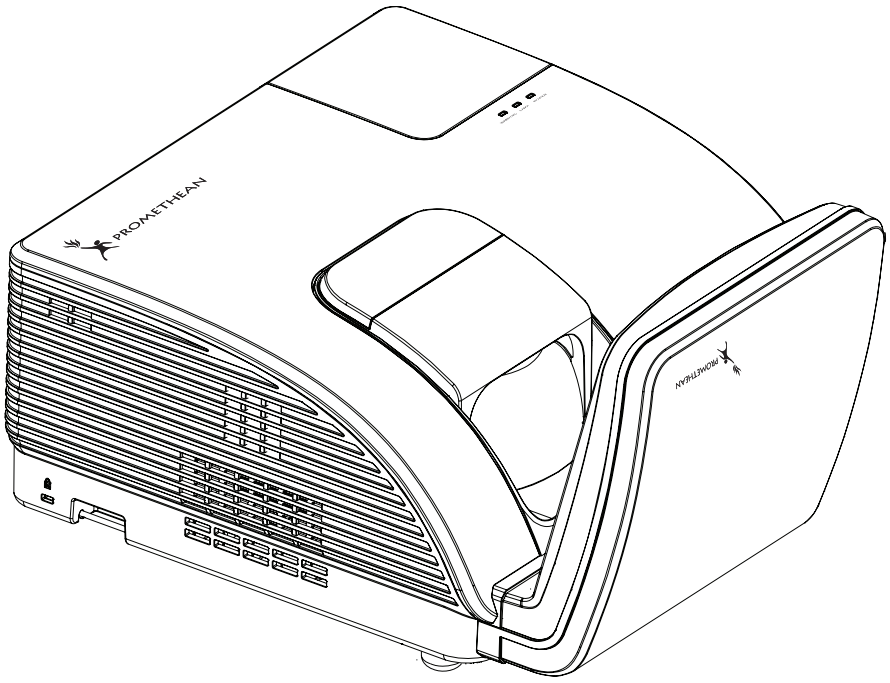
PROMETHEAN

Multimedia Projector

model **EST-P1**

EST-P1C, EST-P1V1, EST-P1V2, EST-P1CV1, EST-P1CV2
EST-P1-G



PROJECTOR

Owner's Manual

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Important Safety Information

Important:
It is strongly recommended that you read this section carefully before using the projector. These safety and usage instructions will ensure that you enjoy many years of safe use of the projector. Keep this manual for future reference.

Symbols Used

Warning symbols are used on the unit and in this manual to alert you of hazardous situations.
The following styles are used in this manual to alert you to important information.

Note:
Provides additional information on the topic at hand.

Important:
Provides additional information that should not be overlooked.

Caution:
Alerts you to situations that may damage the unit.

Warning:
Alerts you to situations that may damage the unit, create a hazardous environment, or cause personal injury.

Throughout this manual, component parts and items in the OSD menus are denoted in bold font as in this example:
“Push the **Menu** button on the remote control to open the **Main** menu.”

General Safety Information

- Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- Follow all warnings and cautions in this manual and on the unit case.
- The projection lamp is extremely bright by design. To avoid damage to eyes, do not look into the lens when the lamp is on.
- Do not place the unit on an unstable surface, cart, or stand.
- Avoid using the system near water, in direct sunlight, or near a heating device.
- Do not place heavy objects such as books or bags on the unit.

Projector Installation Notice

- Place the projector in a horizontal position
  The tilt angle of the projector should not exceed 15 degrees, nor should the projector be installed in any way other than the desktop and ceiling mount, otherwise lamp life could decrease dramatically.

- Allow at least 50 cm clearance around the exhaust vent.

- Ensure that the intake vents do not recycle hot air from the exhaust vent.
- When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed 5 – 35°C while the projector is running, and the air intake and exhaust vents are unobstructed.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is with the acceptable 5 – 35°C range.

Power Safety

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- Remove the batteries from the remote control when storing or not in use for a prolonged period.

Replacing the Lamp

Replacing the lamp can be hazardous if done incorrectly. See *Replacing the Projection Lamp* on page 36 for clear and safe instructions for this procedure. Before replacing the lamp:

- Unplug the power cord.
- Allow the lamp to cool for about one hour.

Cleaning the Projector

- Unplug the power cord before cleaning. See *Cleaning the Projector* on page 39.
- Allow the lamp to cool for about one hour.

Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the *Regulatory Compliance* section on page 52.

Important Recycle Instructions:

Hg Lamp(s) inside this product contain mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check WWW.LAMPRECYCLE.ORG.

Symbol Explanations

DISPOSAL: Do not use household or municipal waste collection services for disposal of electrical and electronic equipment. EU countries require the use of separate recycling collection services.

About this manual

This manual is intended for end users and describes how to install and operate the DLP projector. Wherever possible, relevant information—such as an illustration and its description—has been kept on one page. This printer-friendly format is both for your convenience and to help save paper, thereby protecting the environment. It is suggested that you only print sections that are relevant to your needs.

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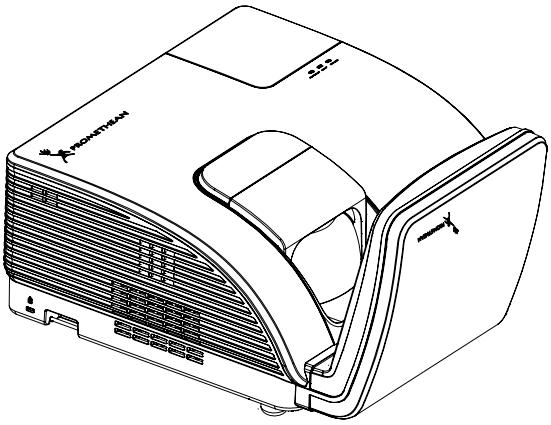
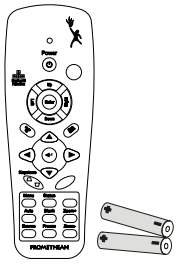
Packing Checklist

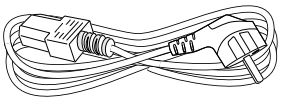
Carefully unpack the projector and check that the following items are included:



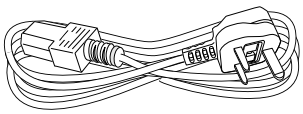
DLP PROJECTOR



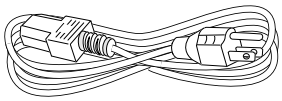
REMOTE CONTROL (WITH TWO AAA BATTERIES)



POWER CORD (EU) (SUBJECT TO LOCATION)

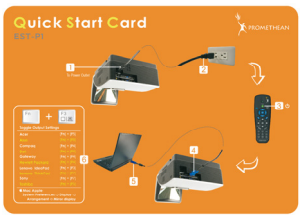


POWER CORD (UK) (SUBJECT TO LOCATION)



POWER CORD (US) (SUBJECT TO LOCATION)

CD-ROM (THIS USER'S MANUAL)



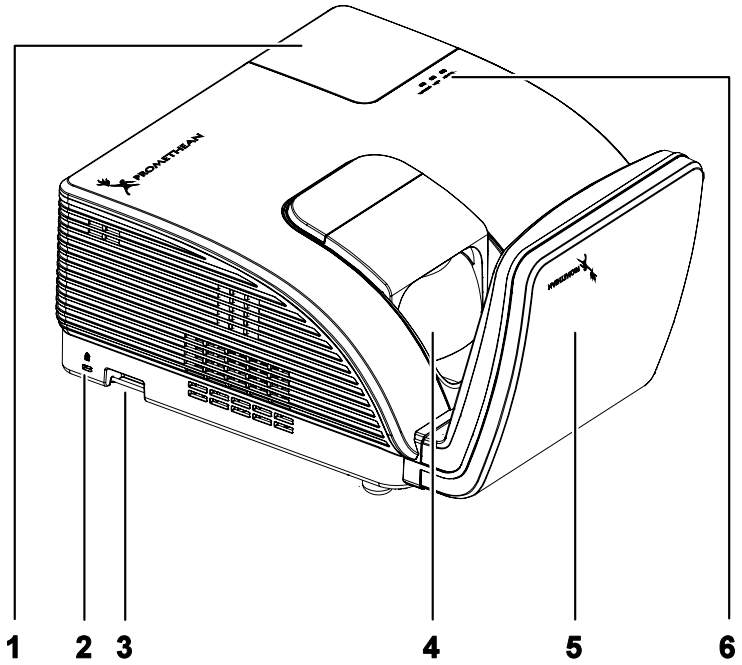
QUICK START CARD

Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommend that you keep the original packing material should you ever need to return the equipment for warranty service.

Caution:
Avoid using the projector in dusty environments.

Views of Projector Parts

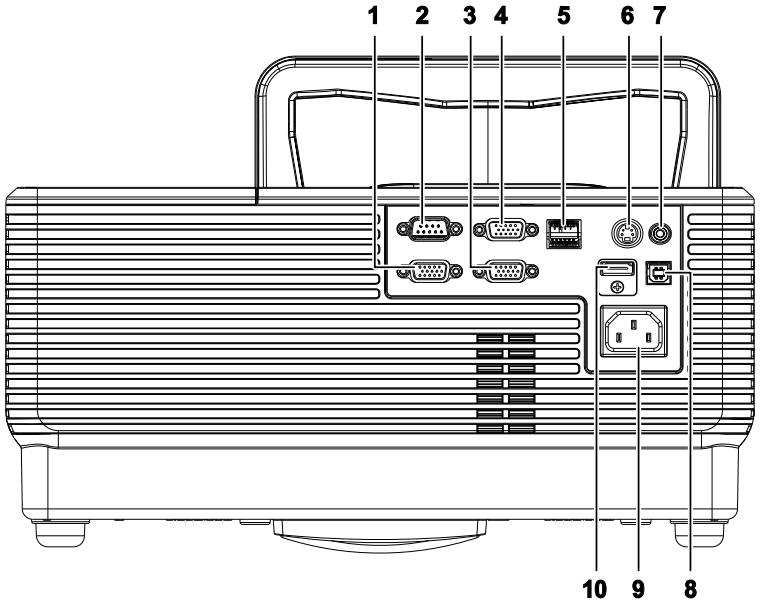
Front-right View



ITEM	LABEL	DESCRIPTION		SEE PAGE:
1.	Lamp cover	Removes cover to replace lamp or color wheel		
2.	Kensington lock	Secure to permanent object with a Kensington® Lock system		***41***
3.	Security bar	For security and authorized usage		
4.	Lens	Projection Lens		
5.	Aspheric mirror	Reflects images		
6.	WARNING LED	Red	Error code	
	LAMP LED	Red	Error code	
		Flashing	Lamp not ready (Warm-up/shutting down/cooling) (see *LED Error Messages* on page 45)	
	POWER LED	Flashing	Error code	

Important:
Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

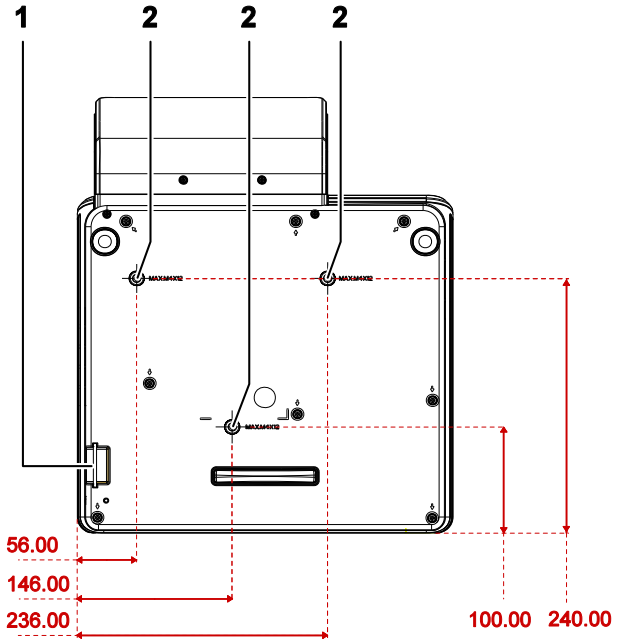
Rear view



ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	VGA OUT	Connect the RGB CABLE to a display (Loop Thru only for VGA IN-1)	***9***
2.	RS-232	Connect RS-232 serial port cable for remote control	
3.	VGA – 1	Connect the RGB CABLE from a computer and components	
4.	VGA – 2	Connect the RGB CABLE from a computer and components	
5.	RJ – 45	Connect a LAN CABLE from Ethernet	
6.	S-VIDEO IN	Connect the S-VIDEO CABLE from a video device	
7.	VIDEO IN	Connect the COMPOSITE CABLE from a video device	
8.	USB	Connect the USB CABLE from a computer	
9.	AC IN	Connect the POWER CABLE	***10***
10.	HDMI	Connect the HDMI CABLE from a HDMI device	***9***

Note:
If your video equipment has various input sources, it is recommended to connect in priority of HDMI/DVI, component (thru VGA), S-Video, Composite for better picture quality.

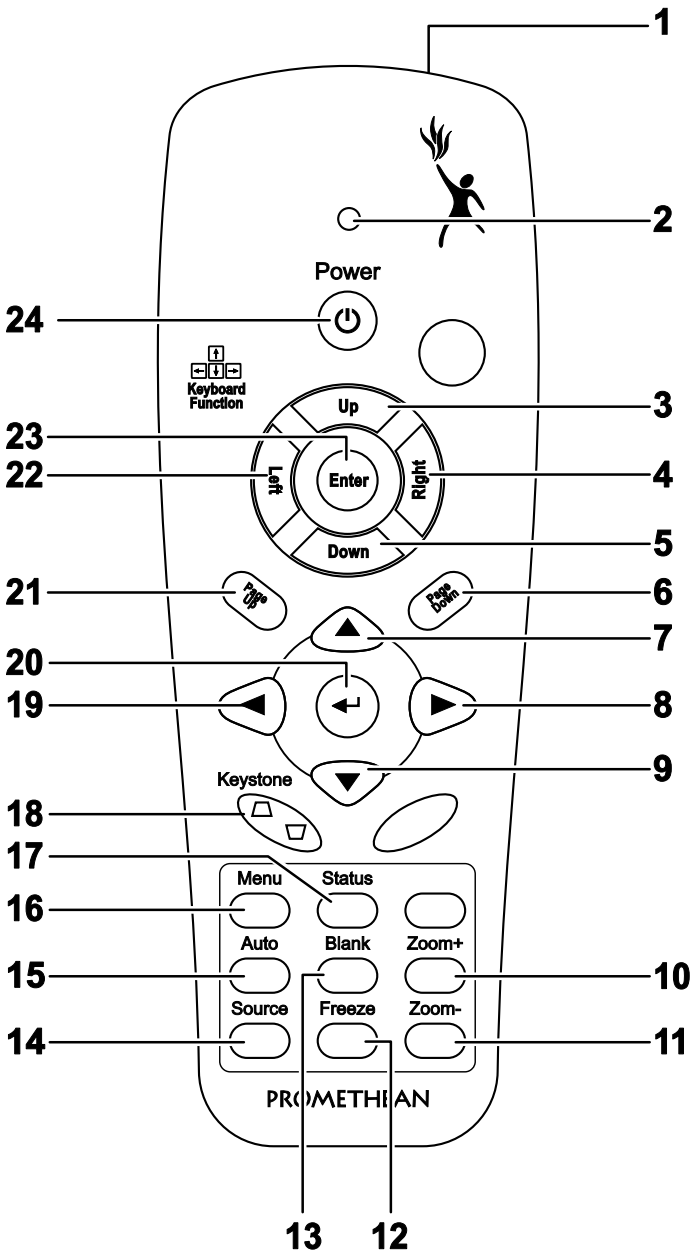
Bottom view



ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	Security bar	For security and authorized usage	***41***
2.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling	

Note:
When installing, ensure that you use only UL Listed ceiling mounts.
For ceiling installations, use approved mounting hardware and M4 screws with a maximum screw depth of 12 mm (0.47 inch).
The construction of the ceiling mount must be of a suitable shape and strength. The ceiling mount load capacity must exceed the weight of the installed equipment, and as an additional precaution be capable of withstanding three times the weight of the equipment (not less than 5.15 kg) over a period of 60 seconds.

Remote Control Parts



Important:
1. *Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.*

2. *Be sure nothing obstructs the path between the remote control and the projector. If the path between the remote control and the projector is obstructed, you can bounce the signal off certain reflective surfaces such as projector screens.*

3. *The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.*

ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	IR transmitter	Transmits signals to projector	
2.	Status LED	Lights when the remote control is used	
3.	Up	Up arrow when connected through USB to a PC	
4.	Right	Right arrow when connected through USB to a PC	
5.	Down	Down arrow when connected through USB to a PC	
6.	Page Down	Page down when connected through USB to a PC	
7.	Up cursor	Navigates and changes settings in the OSD	***15***
8.	Right cursor		
9.	Down cursor		
10.	Zoom+	Zoom in	
11.	Zoom-	Zoom out	
12.	Freeze	Freeze/unfreezes the on-screen picture	
13.	Blank	Makes the screen blank	
14.	Source	Detects the input device	
15.	Auto	Auto adjustment for phase, tracking, size, position	
16.	Menu	Opens the OSD	***15***
17.	Status	Opens the OSD Status menu (the menu only opens when an input device is detected)	***35***
18.	Keystone top/bottom	Corrects image-trapezoid (wider top/bottom) effect	***14***
19.	Left cursor	Navigates and changes settings in the OSD	***15***
20.	Enter	Changes settings in the OSD	
21.	Page Up	Page up when connected through USB to a PC	
22.	Left	Left arrow when connected through USB to a PC	
23.	Enter	Enter key when connected through USB to a PC	
24.	Power	Turns the projector on or off	***10***

Remote Control Operating Range

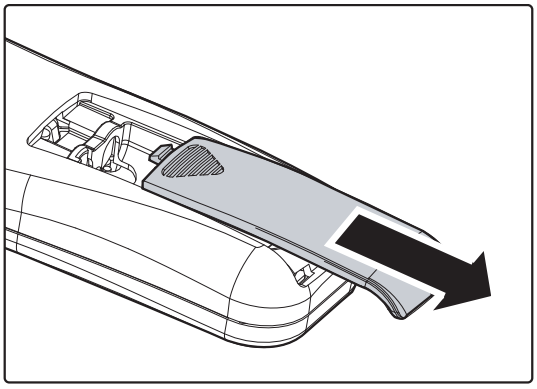
The remote control uses infrared transmission to control the projector. It is not necessary to point the remote directly at the projector. Provided you are not holding the remote perpendicular to the sides or the rear of the projector, the remote will function well within a radius of about 7 meters (23 feet) and 15 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.

Projector and Remote Control Buttons

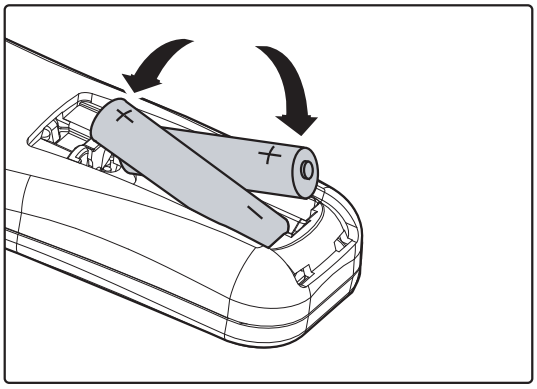
The projector can only be operated using the remote control. All operations can be carried out with the remote control.

Inserting the Remote Control Batteries

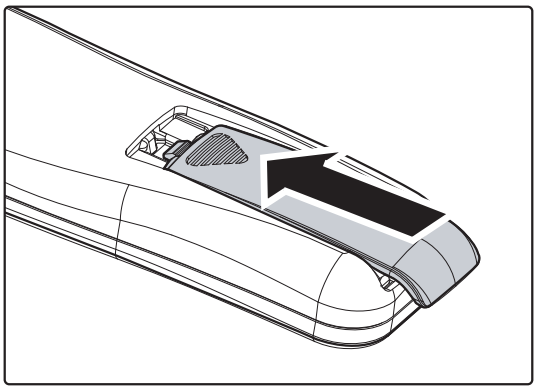
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



2. Insert the battery with the positive side facing up.



3. Replace the cover.



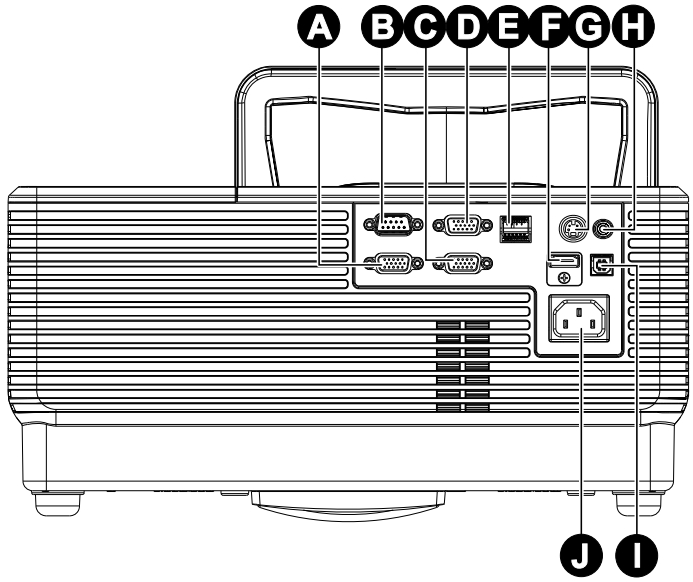
Caution:
1. *Only use AAA batteries (Alkaline batteries are recommended).*

2. *Dispose of used batteries according to local ordinance regulations.*

3. *Remove the batteries when not using the projector for prolonged periods.*

Connecting Input Devices

A PC or notebook computer and video devices can be connected to the projector at the same time. Video devices include DVD, VCD, and VHS players, as well as movie camcorders and digital still cameras. Check the user manual of the connecting device to confirm it has the appropriate output connector.



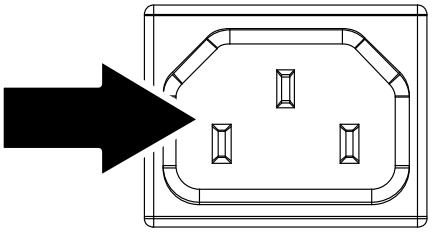
ITEM	LABEL	DESCRIPTION
A	VGA OUT	Connect the RGB CABLE to a display (Loop Thru only for VGA IN-1)
B	RS-232	Connect RS-232 serial port cable for remote control
C	VGA – 1	Connect the RGB CABLE from a computer and components
D	VGA – 2	Connect the RGB CABLE from a computer and components
E	RJ – 45	Connect a LAN CABLE from Ethernet
F	HDMI	Connect the HDMI CABLE from a HDMI device
G	S-VIDEO IN	Connect the S-VIDEO CABLE from a video device
H	VIDEO IN	Connect the COMPOSITE CABLE from a video device
I	USB	Connect the USB CABLE from a computer
J	AC IN	Connect the POWER CABLE

Warning:

As a safety precaution, disconnect all power to the projector and connecting devices before making connections.

Starting and Shutting down the Projector

1. Connect the power cord to the projector. Connect the other end to a wall outlet.
The **POWER** LED on the projector light.



2. Turn on the connected devices.

3. Ensure the **POWER** LED displays a solid orange. Then press the **POWER** button of the remote to turn on the projector.

The projector splash screen displays and connected devices are detected.

See *Setting an Access Password (Security Lock)* on page 12 if security lock is enabled.

4. If more than one input device is connected, press the **SOURCE** button of the remote and use ▲▼ to scroll among devices.
(Component is supported through the RGB to COMPONENT ADAPTER.)

- VGA 1/VGA 2: Analog RGB
  Component: DVD input YCbCr / YPbPr, or HDTV input YPbPr via HD15 connector
- Composite Video: Traditional composite video
- S-Video: Super video (Y/C separated)
- HDMI: HDMI, DVI

5. When the “Power Off? /Press Power again” message appears, press the **POWER** button. The projector turns off.

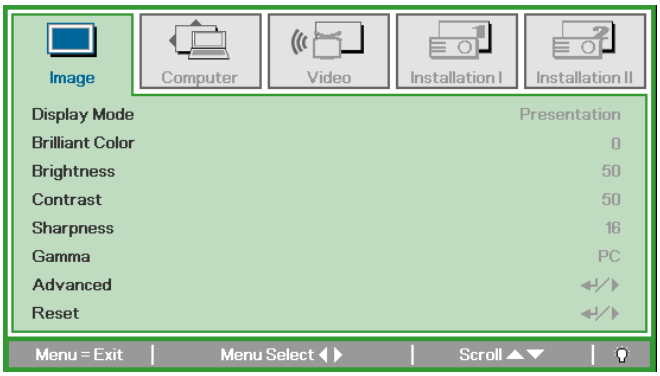
Caution:
Do not unplug the power cord until the POWER LED change to orange–indicating the projector has cooled down.

Setting an Access Password (Security Lock)

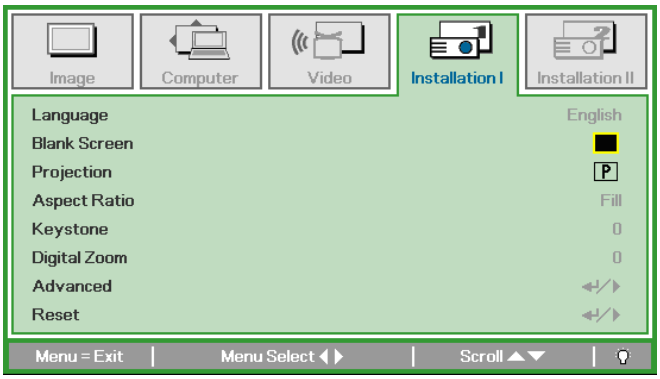
You can use the four (arrow) buttons to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector. (See *Navigating the OSD* on page 15 and *Setting the OSD Language* on page 16 for help on using OSD menus.)

> ***Important:***
> *Keep the password in a safe place. Without the password, you will not be able to use the projector. If you lose the password, contact your reseller for information on clearing the password.*

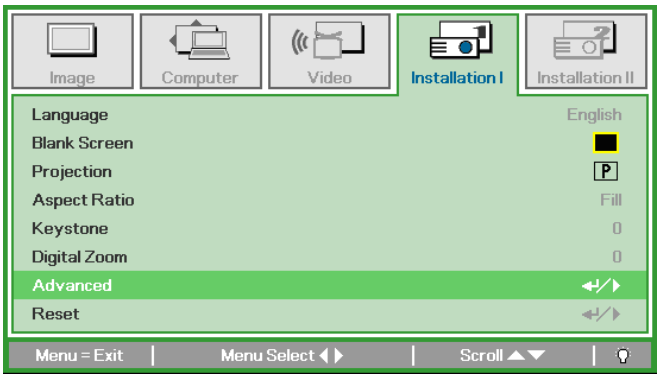
1. Press the **MENU** button to open the OSD menu.



2. Press the cursor ◄► button to move to the **Installation I** menu.



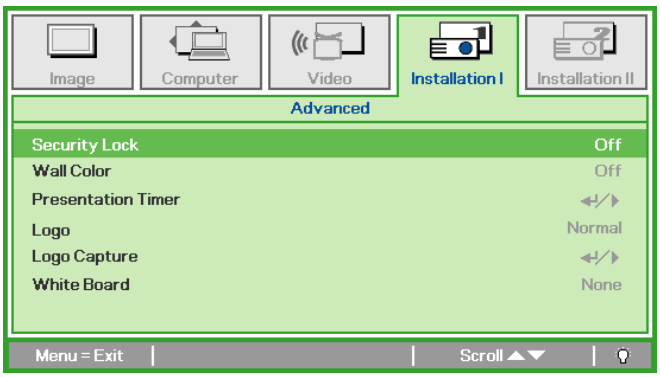
3. Press the cursor ▲▼ button to select **Advanced**.



4. Press the cursor ▲▼ button to select **Security Lock**.

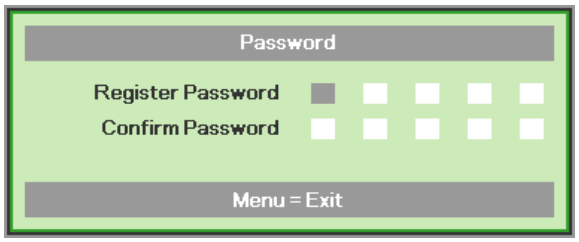
5. Press the cursor ◄► button to enable or disable security lock function.

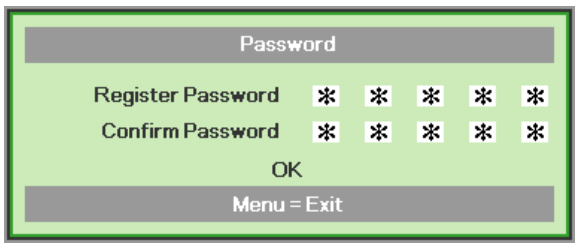
A password dialog box automatically appears.



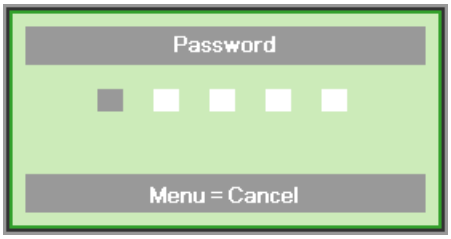
6. You can use the cursor buttons ▲▼◄► on IR remote control for password entry. You can use any combination including the same arrow five times, but not less than five.

Press the cursor buttons in any order to set the password. Push the **MENU** button to exit the dialog box.



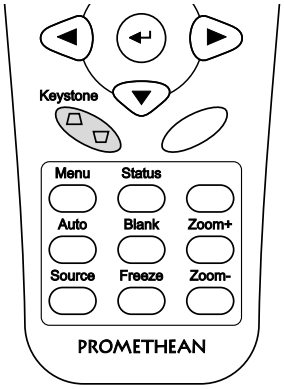


7. The password confirm menu appears when user presses the power-on key in case the **Security Lock** is enabled. Enter the password in the order you set it at step 5. In case you forget the password, please contact the service center.
Service center will validate the owner and help reset the password.



Adjusting the Keystone

1. Use the **KEYSTONE** buttons the remote control to correct image-trapezoid (wider top or bottom) effect.



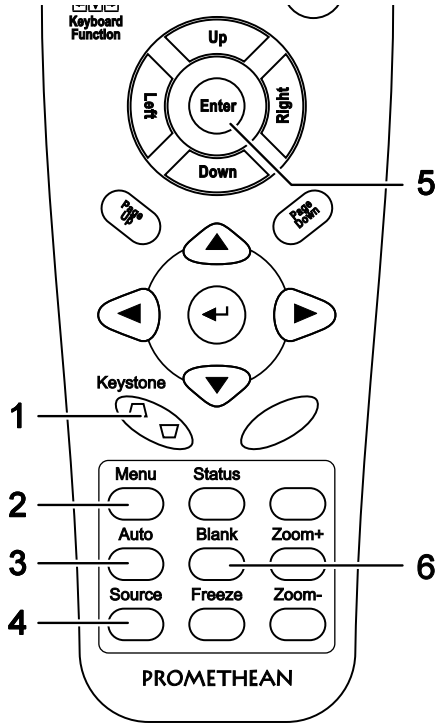
2. The keystone control appears on the display.

OSD Menu Controls

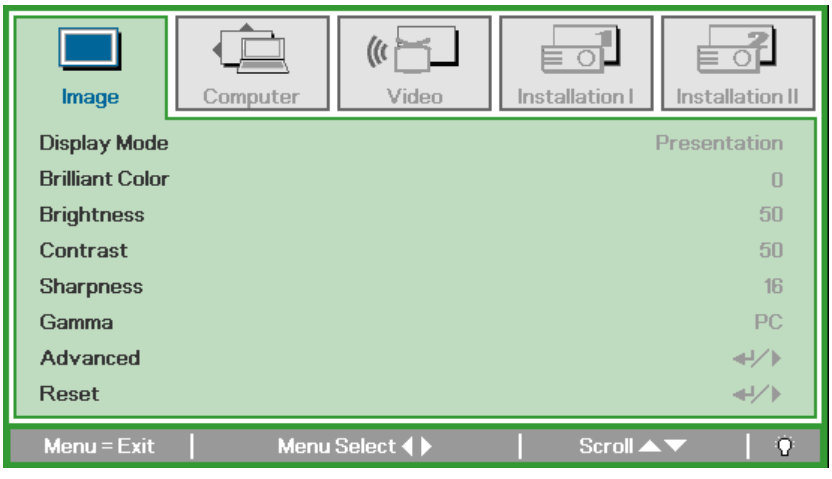
The projector has an OSD that lets you make image adjustments and change various settings.

Navigating the OSD

You can use the remote control cursor buttons to navigate and make changes to the OSD. The following illustration shows the corresponding buttons on the projector.



1. To enter the OSD, press the **MENU** button.
2. There are five menus. Press the cursor ◄► button to move through the menus.
3. Press the cursor ▲▼ button to move up and down in a menu.
4. Press ◄► to change values for settings.
5. Press **MENU** to close the OSD or leave a submenu.

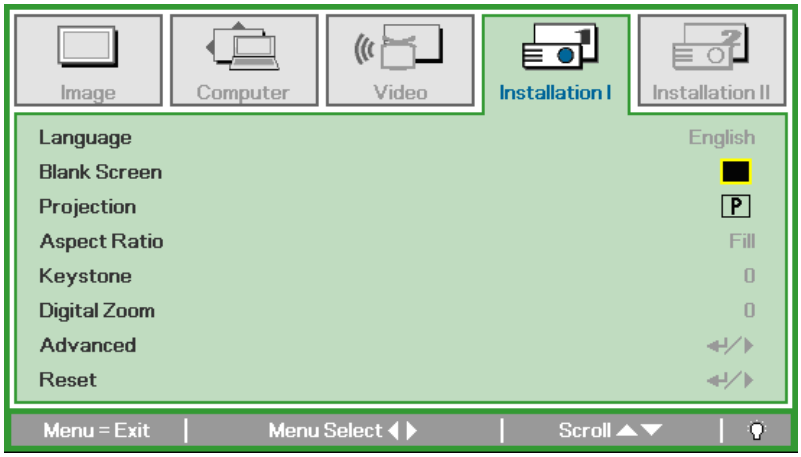


Note:
Depending on the video source, not all items in the OSD are available. For example, the ***Horizontal/Vertical Position*** *items in the* ***Computer*** *menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.*

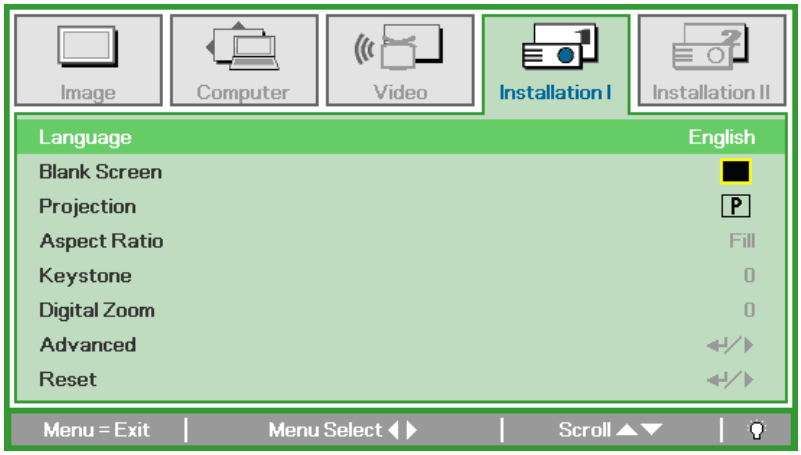
Setting the OSD Language

Set the OSD language to your preference before continuing.

1. Press the **MENU** button. Press the cursor ◄► button to navigate to Installation I.



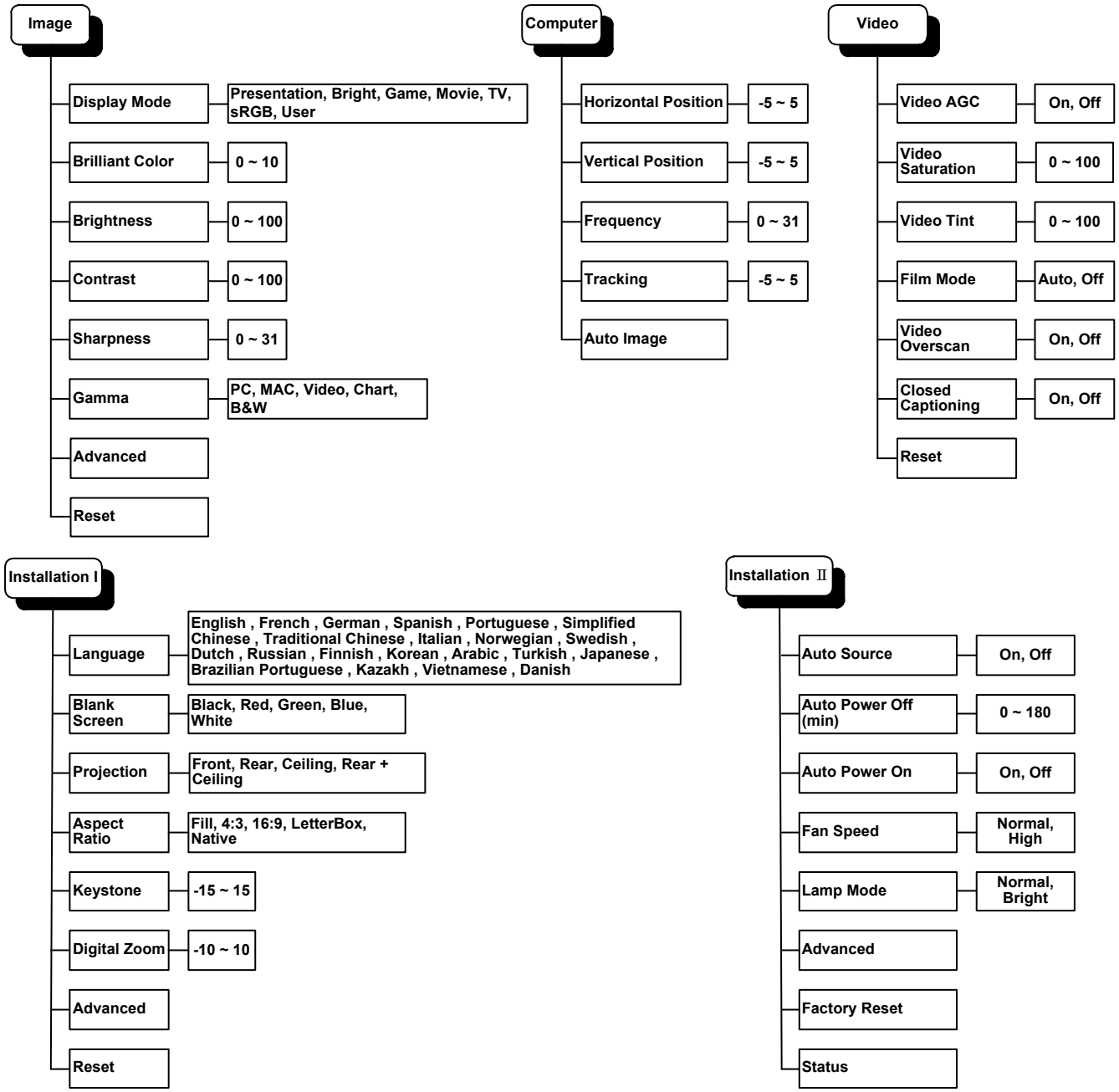
2. Press the cursor ▲▼ button until **Language** is highlighted.



3. Press the cursor ◄► button until the language you want is highlighted.
4. Press the **MENU** button twice to close the OSD.

OSD Menu Overview

Use the following illustration to quickly find a setting or determine the range for a setting.



OSD Sub-Menu Overview

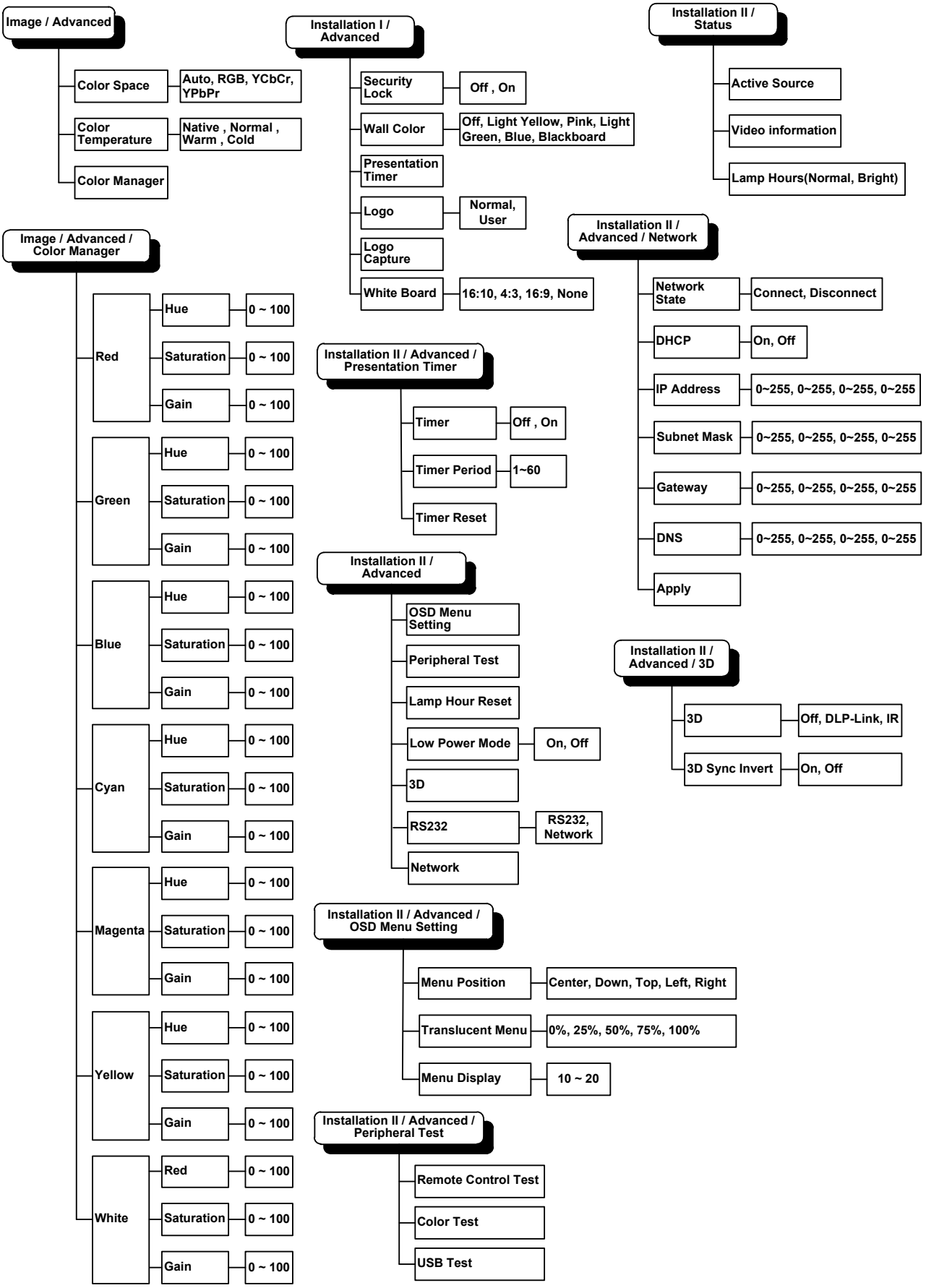
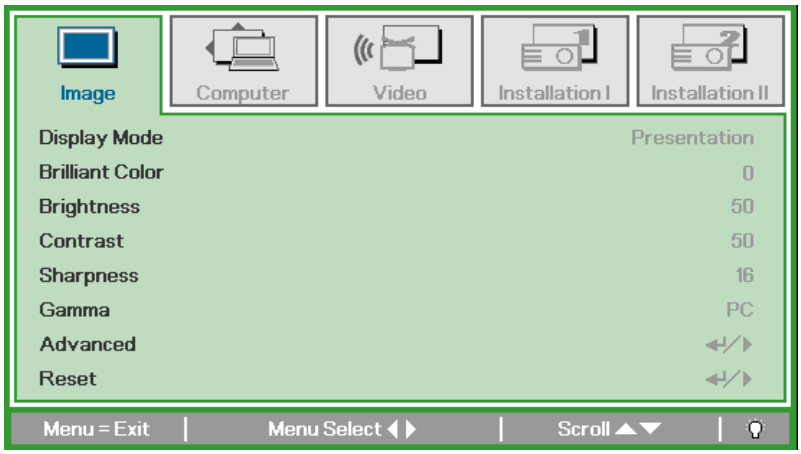


Image Menu

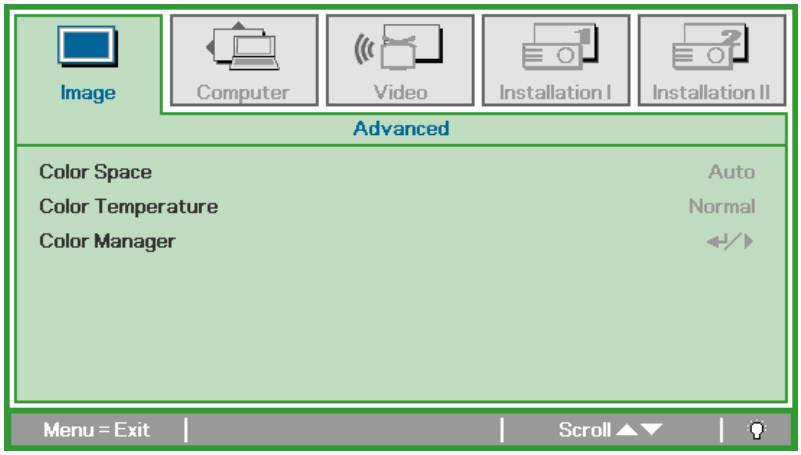
Press the **MENU** button to open the **OSD** menu. Press the cursor ◄► button to move to the **Image Menu**. Press the cursor ▲▼ button to move up and down in the **Image** menu. Press ◄► to change values for settings.



ITEM	DESCRIPTION
Display Mode	Press the cursor ◄► button to set the Display Mode.
Brilliant Color	Press the cursor ◄► button to adjust the Brilliant Color value.
Brightness	Press the cursor ◄► button to adjust the display brightness.
Contrast	Press the cursor ◄► button to adjust the display contrast.
Sharpness	Press the cursor ◄► button to adjust the display sharpness level.
Gamma	Press the cursor ◄► button to adjust the gamma correction of the display.
Advanced	Press ↵ (Enter) / ► to enter the Advanced menu. See *Advanced Feature* on page 20.
Reset	Press ↵ (Enter) / ► to reset all settings to default values.

Advanced Feature

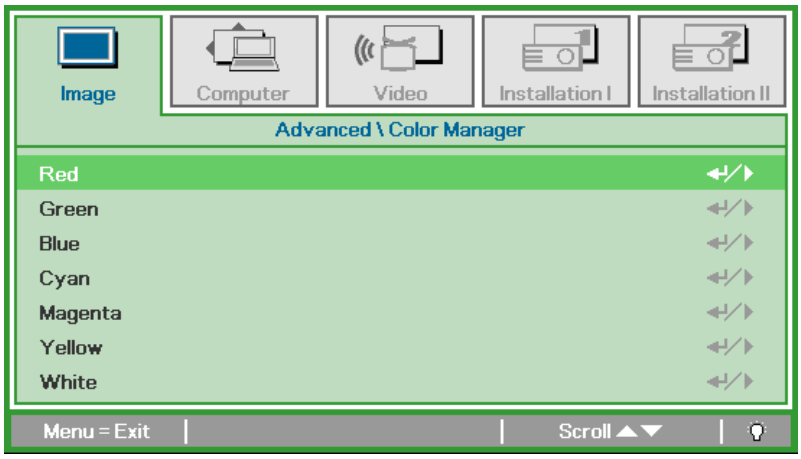
Press the **Menu** button to open the **OSD** menu. Press ◄► to move to the **Image** menu. Press ▼▲ to move to the **Advanced** menu and then press **Enter** or ►. Press ▼▲ to move up and down in the **Advanced** menu.



ITEM	DESCRIPTION
Color Space	Press the cursor ◄► button to adjust the color space. (Range: Auto – RGB – YPbPr – YCbCr)
Color Temperature	Press the cursor ◄► button to adjust the color temperature. (Range: Cold – Normal – Warm)
Color Manager	Press ↵ (Enter) / ► to enter the color manager menu. (Range: Red-Green-Blue-Cyan-Magenta-Yellow-White). See page 21 for more information on Color Manager.

Color Manager

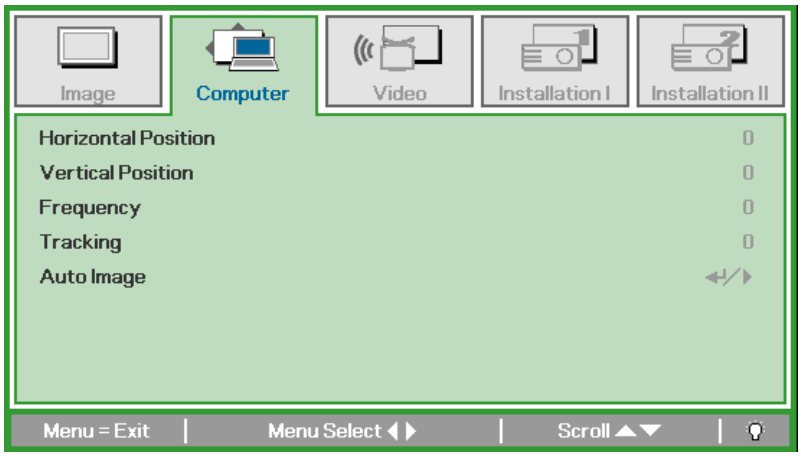
Press ↵ (Enter) / ► to enter the **Color Manager** sub menu.



ITEM	DESCRIPTION
Red	Select to enter the Red Color Manager. Press the ◄► buttons to adjust the Hue, Saturation, and Gain.
Green	Select to enter the Green Color Manager. Press the ◄► buttons to adjust the Hue, Saturation, and Gain.
Blue	Select to enter the Blue Color Manager. Press the ◄► buttons to adjust the Hue, Saturation, and Gain.
Cyan	Select to enter the Cyan Color Manager. Press the ◄► buttons to adjust the Hue, Saturation, and Gain.
Magenta	Select to enter the Magenta Color Manager. Press the ◄► buttons to adjust the Hue, Saturation, and Gain.
Yellow	Select to enter the Yellow Color Manager. Press the◄► buttons to adjust the Hue, Saturation, and Gain.
White	Select to enter the White Color Manager. Press the ◄► buttons to adjust the Red, Green, and Blue.

Computer Menu

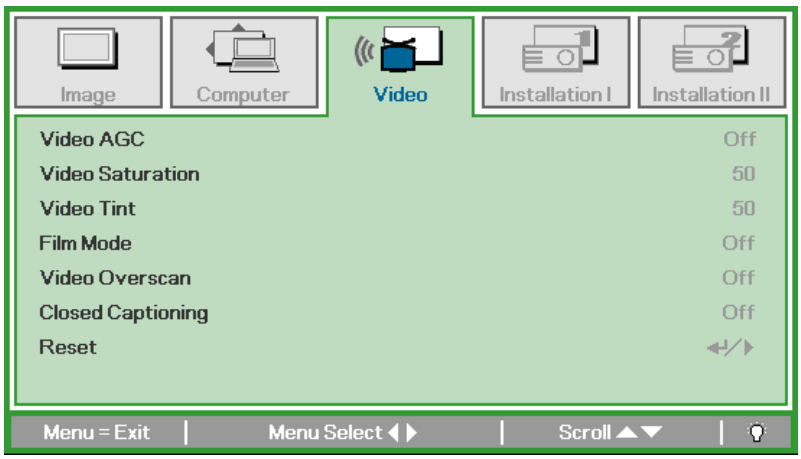
Press the **MENU** button to open the **OSD** menu. Press the cursor ◄► button to move to the **Computer** menu. Press the cursor ▲▼ button to move up and down in the computer menu. Press ◄► to change values for settings.



ITEM	DESCRIPTION
Horizontal Position	Press the cursor ◄► button to adjust the display position to left or right.
Vertical Position	Press the cursor ◄► button to adjust the display position to up or down.
Frequency	Press the cursor ◄► button to adjust the A/D sampling clock.
Tracking	Press the cursor ◄► button to adjust the A/D sampling dot.
Auto Image	Press ↵ (Enter) / ► to automatically adjustment for phase, tracking, size and position.

Video Menu

Press the **MENU** button to open the **OSD** menu. Press the cursor ◄► button to move to the **Video** menu. Press the cursor ▲▼ button to move up and down in the **Video** menu. Press ◄► to change values for settings.

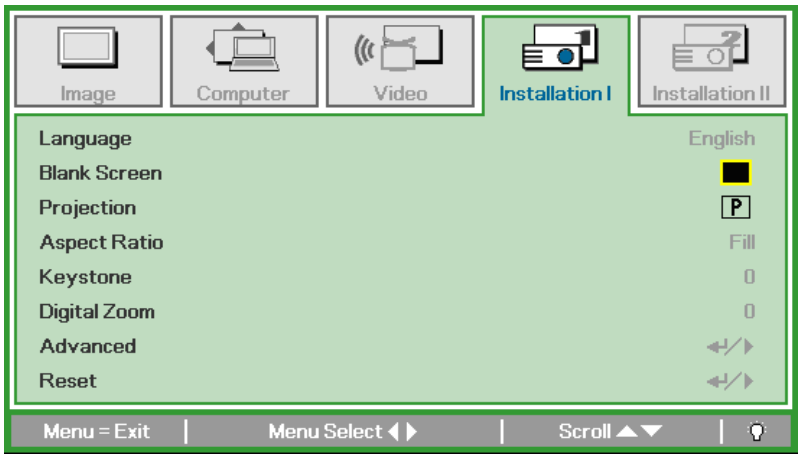


ITEM	DESCRIPTION
Video AGC	Press the ◄► buttons to enable or disable the Automatic Gain Control for video source.
Video Saturation	Press the ◄► buttons to adjust the video saturation.
Video Tint	Press the ◄► buttons to adjust the video tint/hue.
Film Mode	Press the ◄► buttons to select a different film mode.
Video Overscan	Press the ◄► buttons to enable or disable video over scan.
Closed Captioning	Press the ◄► buttons to enable or disable closed captioning.
Reset	Press ↵ (Enter) / ► to reset all settings to default values.

Note:
Video jagging may occur when playing interlace video. To overcome this issue, open the Video menu and adjust the Film Mode feature.

Installation I Menu

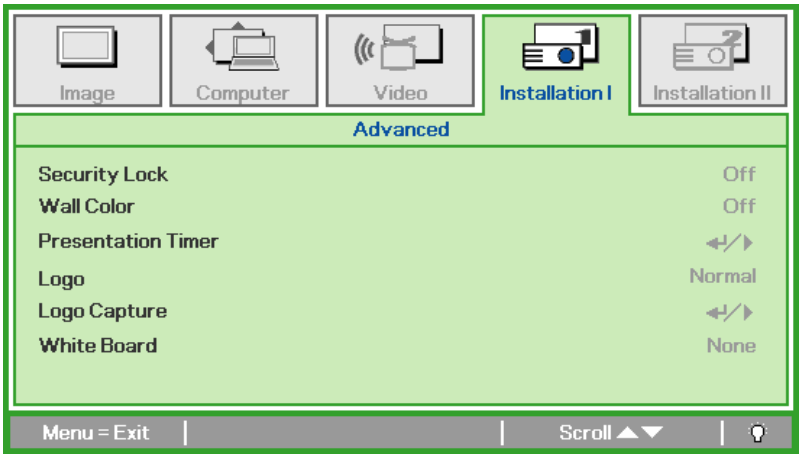
Press the **MENU** button to open the **OSD** menu. Press the cursor ◄► button to move to the **Installation I** menu. Press the cursor ▲▼ button to move up and down in the **Installation I** menu. Press ◄► to change values for settings.



ITEM	DESCRIPTION
Language	Press the cursor ◄► button to select a different localization Menu.
Blank Screen	Press the cursor ◄► button to select different color to blank the screen.
Projection	Press the cursor ◄► button to choose from four projection methods:
Aspect Ratio	Press the cursor ◄► button to adjust the video aspect ratio.
Keystone	Press the cursor ◄► button to adjust the display keystone.
Digital Zoom	Press the cursor ◄► button to adjust the Digital Zoom menu.
Advanced	Press ↵ (Enter) / ► to the Advanced menu. See *Advance Feature* on page 25.
Reset	Press ↵ (Enter) / ► to reset all settings to default values (except Language).

Advanced Feature

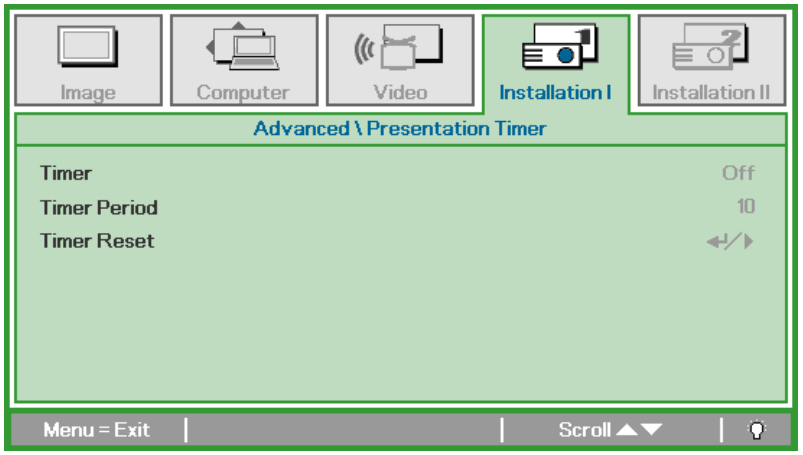
Press the **Menu** button to open the **OSD** menu. Press ◄► to move to the **Installation I** menu. Press ▲▼ to move to the **Advanced** menu and then press **Enter** or ►. Press ▲▼ to move up and down in the **Advanced** menu. Press ◄► to change values for setting.



ITEM	DESCRIPTION
Security Lock	Press the cursor ◄► button to enable or disable security lock function.
Wall Color	Press the cursor ◄► button to enable or disable wall color function (Off/ Light Yellow/ Pink/ Light Green/ Blue/ Blackboard).
Presentation Timer	Press ↵ (Enter) / ► to the Presentation Timer menu. See *Presentation Timer* on page 25.
Logo	Press ◄► to select the screen to display during startup (Normal/ User).
Logo Capture	Press ↵ (Enter) / ► to capture a displayed screen to use as the startup screen.
White Board	Press the cursor ◄► button to select the video aspect ratio to allocate white board size.

Presentation Timer

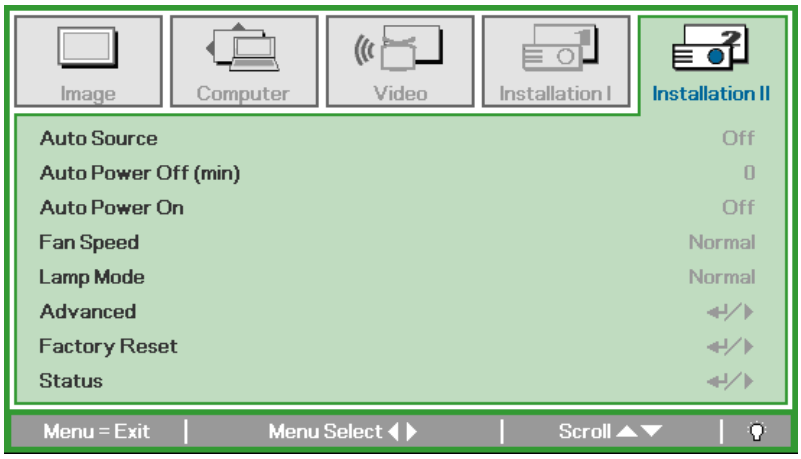
The Presentation Timer function can indicate the presentation time on the screen to help you achieve better time management when giving presentations.



ITEM	DESCRIPTION
Timer	Press the cursor ◄► button to enable or disable presentation timer.
Timer Period	Press the cursor ◄► button to select timer period (1 ~ 60 minutes)
Timer Reset	Press ↵ (Enter) / ► to reset the timer settings.

Installation II Menu

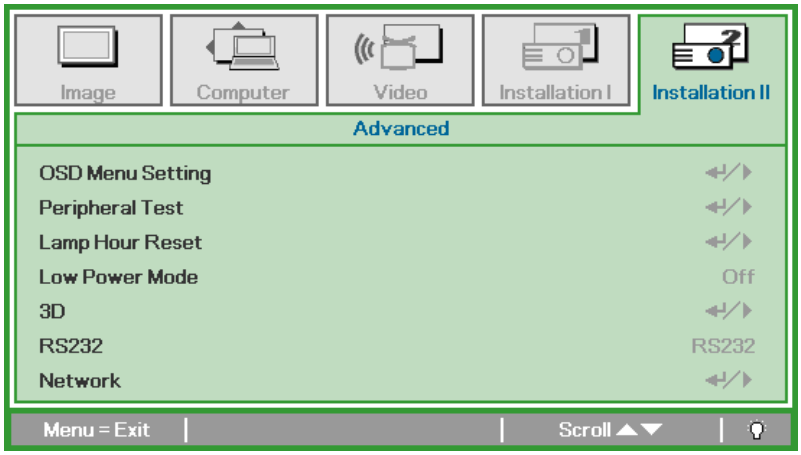
Press the **MENU** button to open the **OSD** menu. Press the cursor ◄► button to move to the **Installation II** menu. Press the cursor ▲▼ button to move up and down in the Installation II menu.



ITEM	DESCRIPTION
Auto Source	Press the cursor ◄► button to enable or disable automatic source detection.
Auto Power Off (min.)	Press the cursor ◄► button to enable or disable automatic shutdown of lamp when no signal.
Auto Power On	Press the cursor ◄► button to enable or disable automatic power On when AC power is supplied.
Fan Speed	Press the cursor ◄► button to toggle between Normal and High fan speeds. **Note:** We recommend selecting high speed in high temperatures, high humidity, or high altitude (higher than 1500m/4921ft)areas.
Lamp Mode	Press the cursor ◄► button to select the lamp mode for higher brightness or lower brightness to save lamp life.
Advanced	Press ↵ (Enter) / ► to enter the Advanced menu. See *Advanced Feature* on page 27.
Factory Reset	Press ↵ (Enter) / ► to reset all items to factory preset values.
Status	Press ↵ (Enter) / ► to enter the Status menu. See page 35 for more information on Status.

Advanced Feature

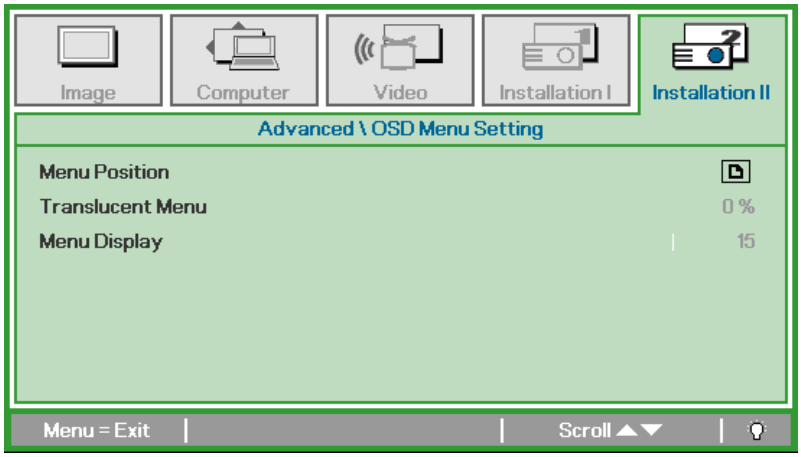
Press the **Menu** button to open the **OSD** menu. Press ◄► to move to the **Installation II** menu. Press ▲▼ to move to the **Advanced** menu and then press **Enter** or ►. Press ▲▼ to move up and down in the **Advanced** menu. Press ◄► to change values for setting.



ITEM	DESCRIPTION
OSD Menu Setting	Press ↵ (Enter) / ► to enter the OSD setting menu. See page 28 for more information on OSD Menu Setting.
Peripheral Test	Press ↵ (Enter) / ► to enter the Peripheral Test menu. See page 28 for more information on Peripheral Test.
Lamp Hour Reset	After replacing the lamp, this item should be reset. See page 29 for more information on Lamp Hour Reset.
Low Power Mode	Press ◄► to turn Low Power Mode on or off.
3D	Press ↵ (Enter) / ► to enter the 3D menu. See page 30 for more information on 3D settings.
RS232	Press ◄► to select RS232 (remote) or Network (LAN) mode depending on projector connection method.
Network	Press ↵ (Enter) / ► to enter the Network menu. See page 29 for more information on Network settings.

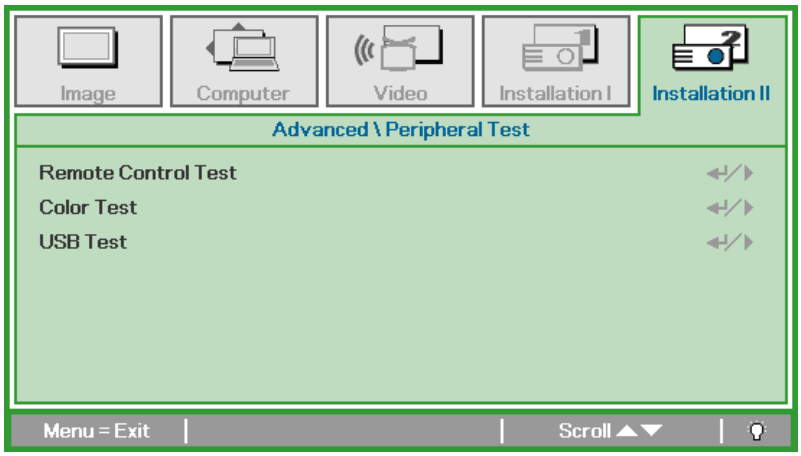
Note:
To enjoy the 3D function, first enable the Play Movie in 3D setting found in your DVD device under the 3D Disc Menu.

OSD Menu Setting



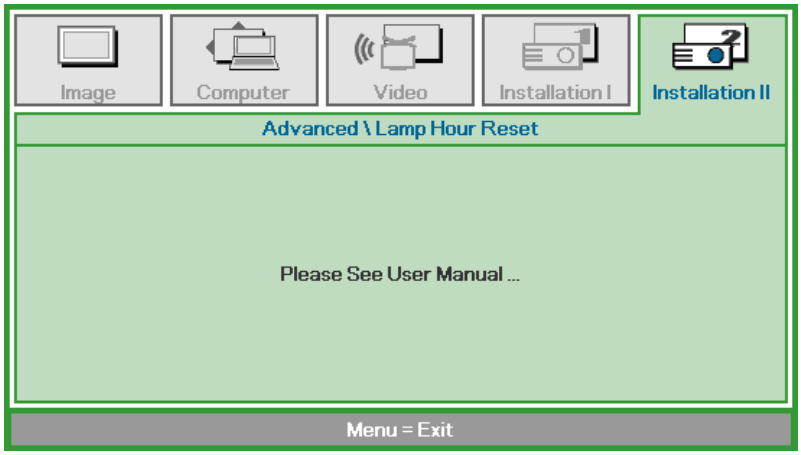
ITEM	DESCRIPTION
Menu Position	Press ◄► button to select different OSD location.
Translucent Menu	Press ◄► button to select OSD background translucent level.
Menu Display	Press ◄► button to select OSD timeout delay.

Peripheral Test



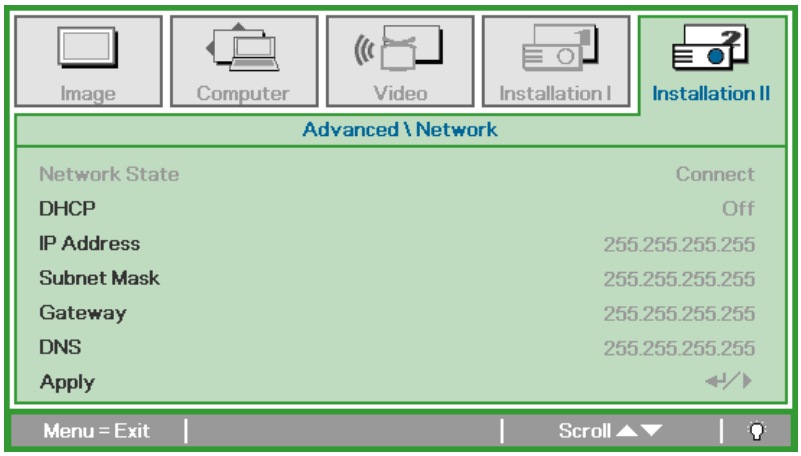
ITEM	DESCRIPTION
Remote Control Test	Press ↵ (Enter) / ► to test the IR remote controller for diagnostic.
Color Test	Press ↵ (Enter) / ► to select different colors on screen.
USB Test	Press ↵ (Enter) / ► to test the USB connection with connected PC.

Lamp Hour Reset



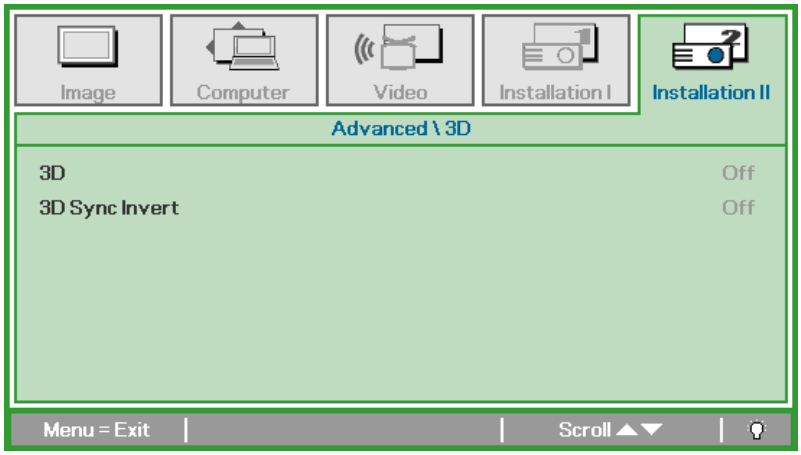
Please refer to *Resetting the Lamp* on page 38 to reset the lamp hour counter.

Network



ITEM	DESCRIPTION
Network State	Displays the network connection status.
DHCP	Press ◄► to turn DHCP On or Off. **Note:** If you select DHCP Off, complete the IP Address, Subnet Mask, Gateway, and DNS fields.
IP Address	Enter a valid IP address if DHCP is turned off.
Subnet Mask	Enter a valid Subnet Mask if DHCP is turned off.
Gateway	Enter a valid Gateway address if DHCP is turned off.
DNS	Enter a valid DNS name if DHCP is turned off.
Apply	Press ↵ (Enter) / ► to confirm settings.

3D

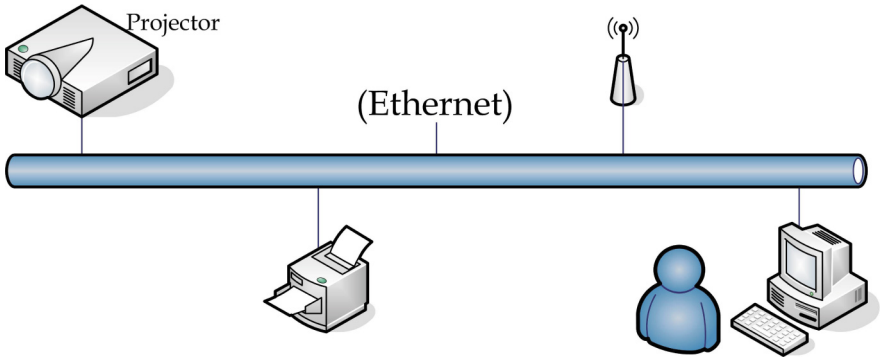


ITEM	DESCRIPTION
3D	Press ◄► to select Off, DLP-Link or IR.
3D Sync Invert	Press ◄► to turn 3D Sync Invert On or Off.

Note:
The EST-P1 is 3D ready, please contact Promethean for more details.

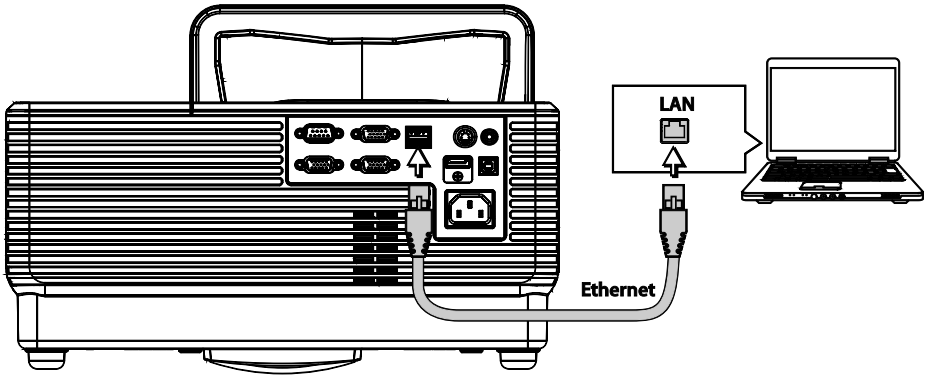
For simplicity and ease of operation, the projector provides diverse networking and remote management features.

The LAN/RJ45 function of the projector through a network, such as remotely manage: Power On/Off, Brightness and Contrast settings. Also, projector status information, such as: Video-Source, Sound-Mute, etc.

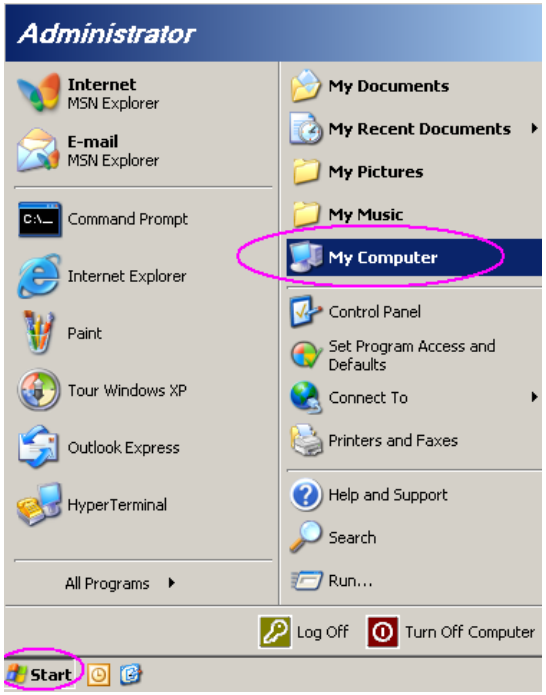


LAN_RJ45

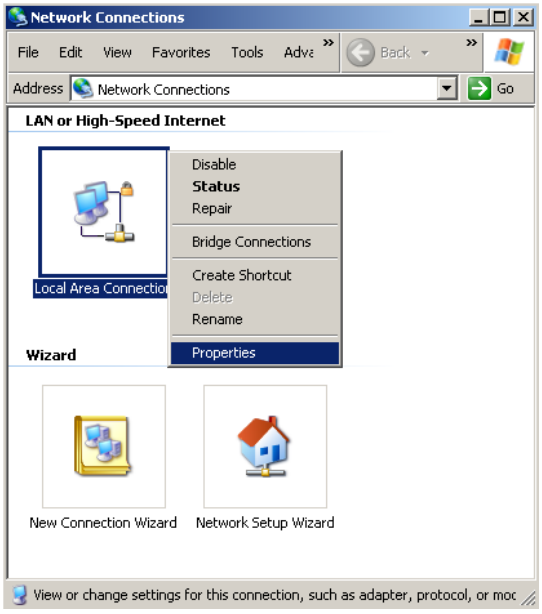
1. Connect an RJ45 cable to RJ45 ports on the projector and the PC (Laptop).



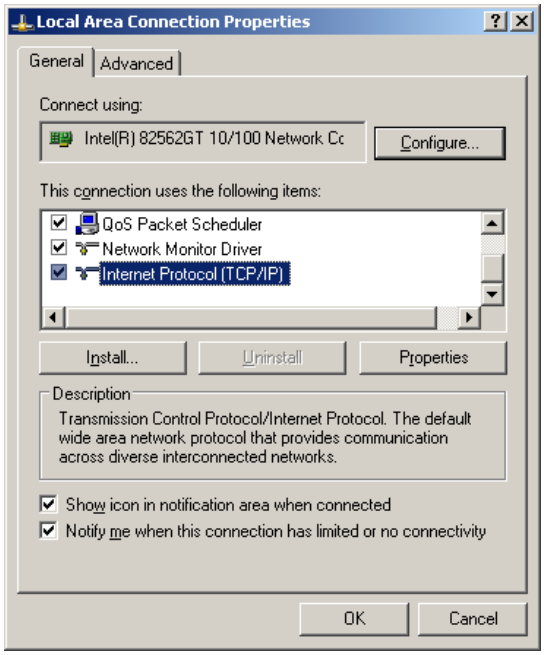
2. On the PC (Laptop), select **Start** **Control Panel** **Network Connections**.



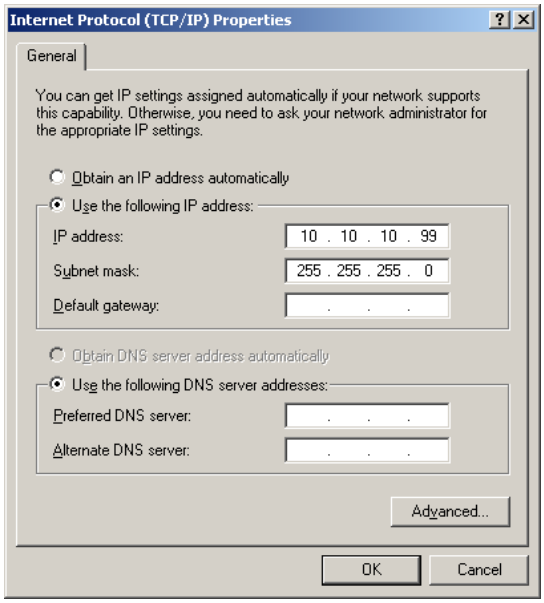
3. Right-click on **Local Area Connection**, and select **Properties**.



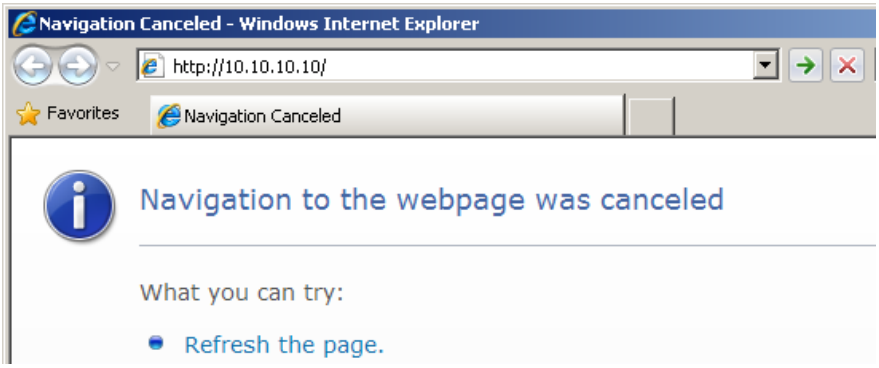
4. In the **Properties** window, select the **General** tab, and select **Internet Protocol (TCP/IP)**.
5. Click **Properties**.



6. Click **Use the following IP address** and fill in the IP address and Subnet mask, then click **OK**.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 10 . 10 . 10 . 99
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

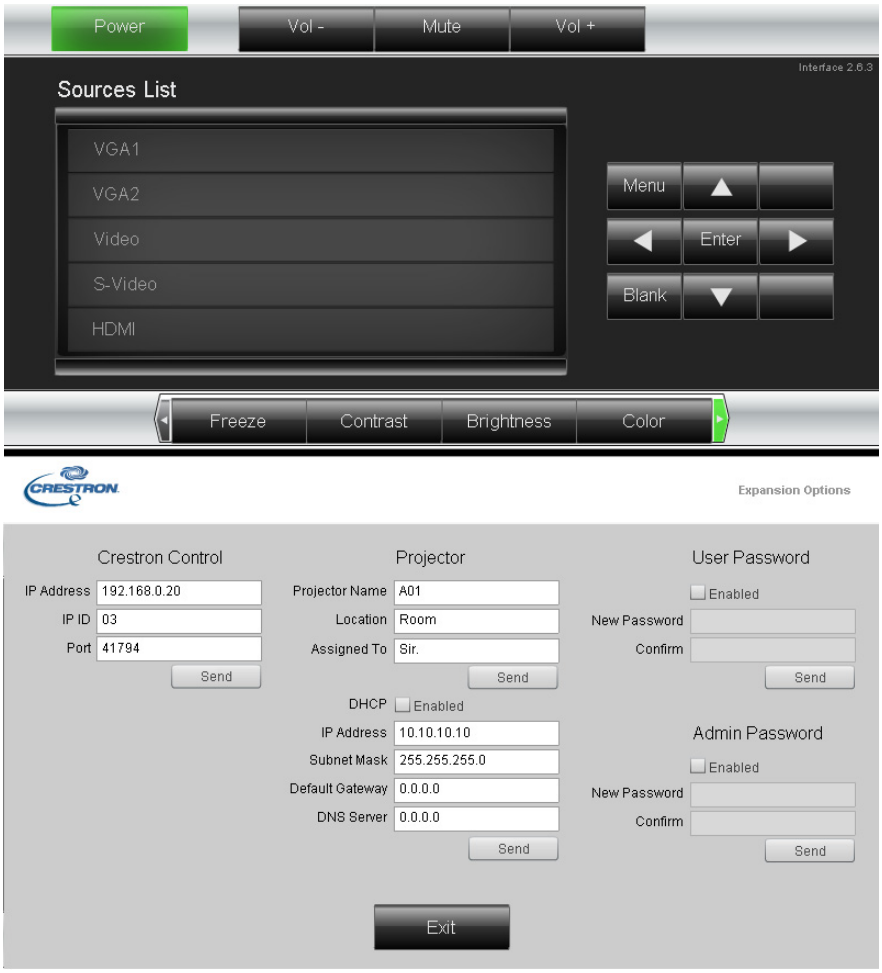
7. Press the **Menu** button on the projector.
8. Select **Installation II** **Advanced** **Network**.
9. After getting into **Network**, input the following:
   - DHCP: Off
   - IP Address: 10. 10. 10. 10
   - Subnet Mask: 255.255.255.0
   - Gateway: 0.0.0.0
   - DNS Server: 0.0.0.0
10. Press ↵ (Enter) / ► to confirm settings.
11. Open a web browser (for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).



12. In the Address bar, input the IP address: 10. 10. 10. 10.
13. Press ↵ (Enter) / ►.

    The projector is setup for remote management. The LAN/RJ45 function displays as follows.

    Based on network web-page for the input-string in **tools** tab, the limitation for Input-Length is in the below list (“space” and the other punctuation key included):

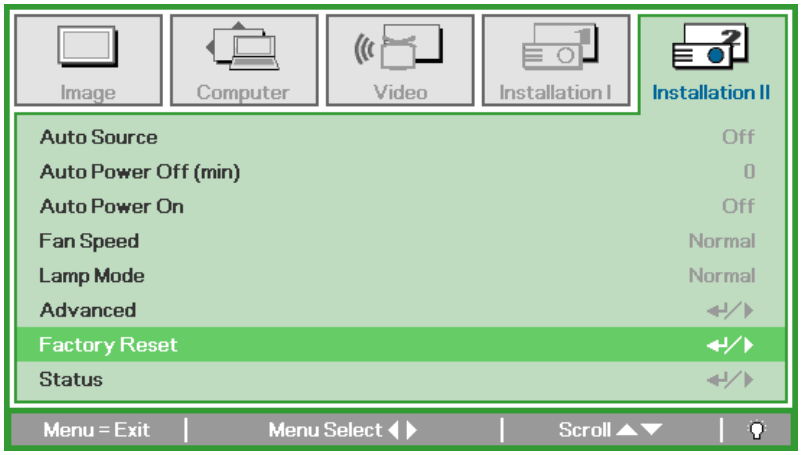


CATEGORY	ITEM	INPUT-LENGTH
Crestron Control	IP Address	14
	IP ID	2
	Port	5
Projector	Projector Name	10
	Location	9
	Assigned To	8
Network Configuration	DHCP (Enabled)	(N/A)
	IP Address	15
	Subnet Mask	15
	Default Gateway	15
	DNS Server	15
User Password	Enabled	(N/A)
	New Password	15
	Confirm	15
Admin Password	Enabled	(N/A)
	New Password	15
	Confirm	15

For more information, please visit http://www.crestron.com/.

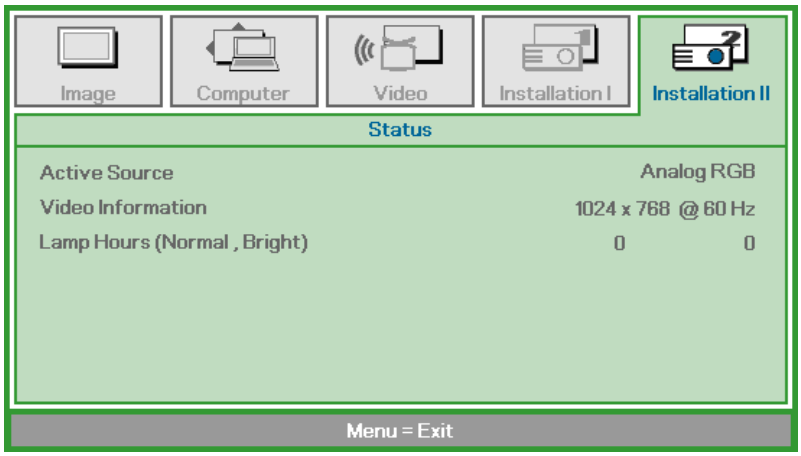
Factory Reset

Press the cursor ▲▼ button to move up and down in the **Installation II** menu. Select the **Factory Reset** sub menu and press ↵ (Enter) / ► to reset all the menu items to the factory default values (expect Language and Security Lock).



Status

Press the cursor ▲▼ button to move up and down in the **Installation II** menu. Select the **Installation II** sub menu and press ↵ (Enter) / ► to enter the **Status** sub menu.



ITEM	DESCRIPTION
Active Source	Display the activated source.
Video Information	Displays resolution/video information for RGB source and color standard for Video source.
Lamp Hours (Normal, Bright)	Lamp hour used information is displayed. Normal and Bright counters are separated.

Replacing the Projection Lamp

The projection lamp should be replaced when it burns out. It should only be replaced with a certified replacement part, which you can order from your local dealer.

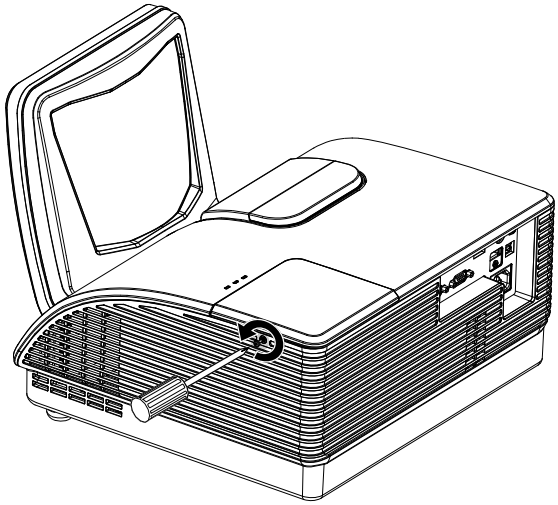
Important:
a. *The projection lamp used in this product contains a small amount of mercury.*

b. *Do not dispose this product with general household waste.*

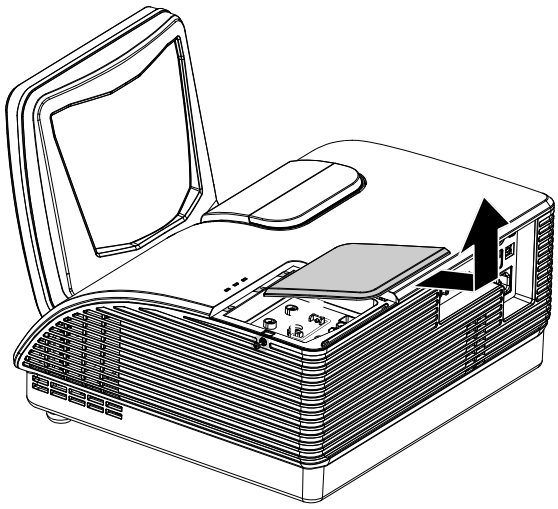
c. *Disposal of this product must be carried out in accordance with the regulations of your local authority.*

Warning:
Be sure to turn off and unplug the projector at least 30 minutes before replacing the lamp. Failure to do so could result in a severe burn.

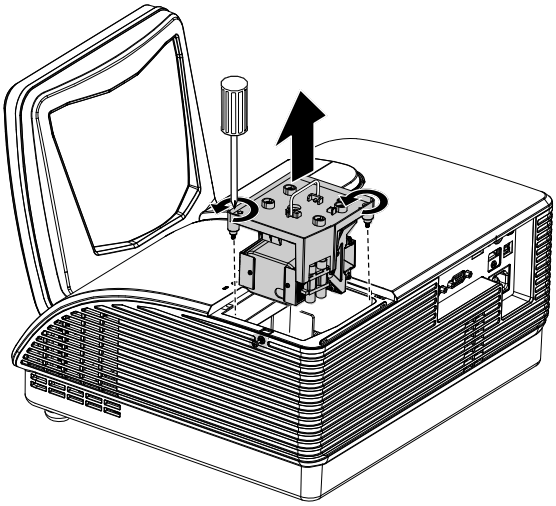
1. Remove the single screw on the lamp compartment cover.



2. Remove the lamp compartment cover.



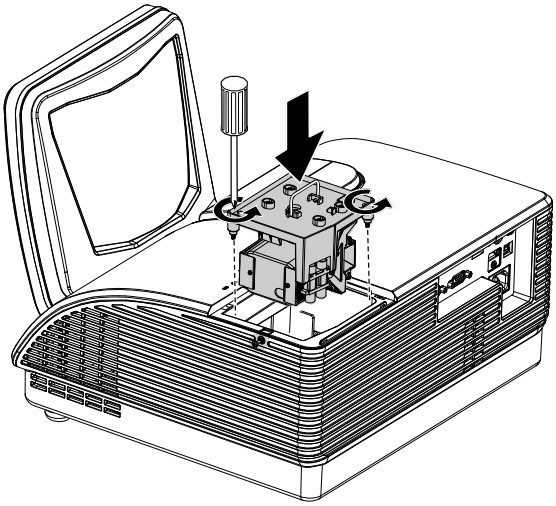
3. Remove the two screws from the lamp module.



4. Lift the module handle up.

5. Pull firmly on the module handle to remove the lamp module.

6. Reverse steps 1 to 5 to install the new lamp module. While installing, align the lamp module with the connector and ensure it is level to avoid damage.



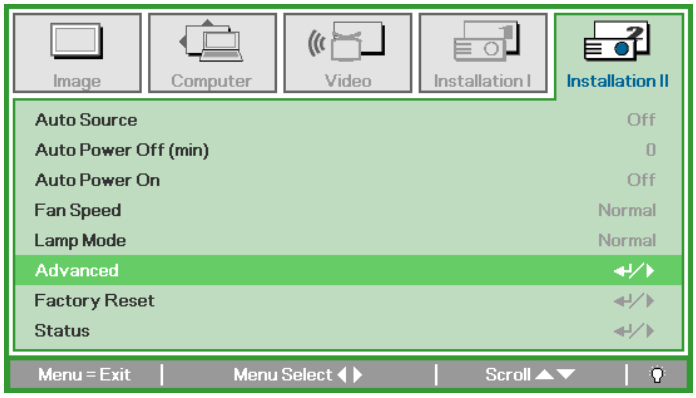
Note: The lamp module must sit securely in place and the lamp connector must be connected properly before tightening the screws.

Resetting the Lamp

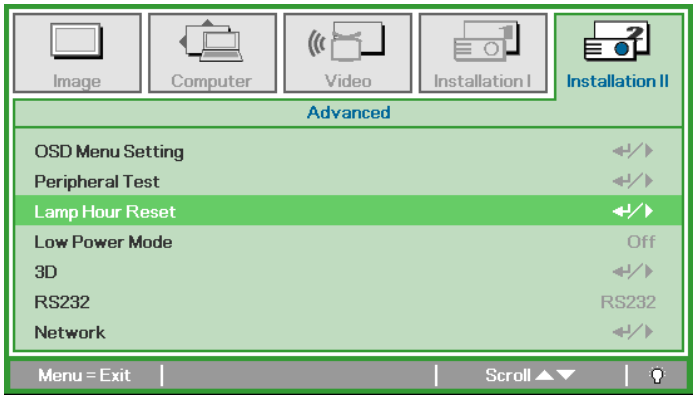
After replacing the lamp, you should reset the lamp hour counter to zero. Refer to the following:

1. Press the **MENU** button to open the OSD menu.

2. Press the cursor ◄► button to move to the **Installation II** menu. Press the cursor button to move down to **Advanced**.



3. Press the cursor ▼▲ button to move down to **Lamp Hour Reset**.

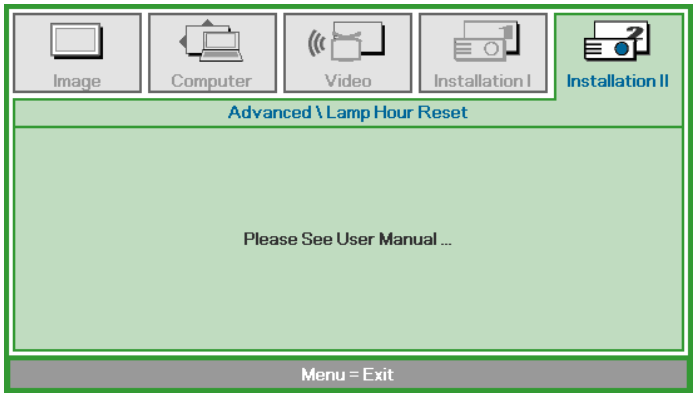


4. Press the cursor ► or Enter button.

A message screen appears.

5. Press ▼▲◄► buttons to reset the lamp hour.

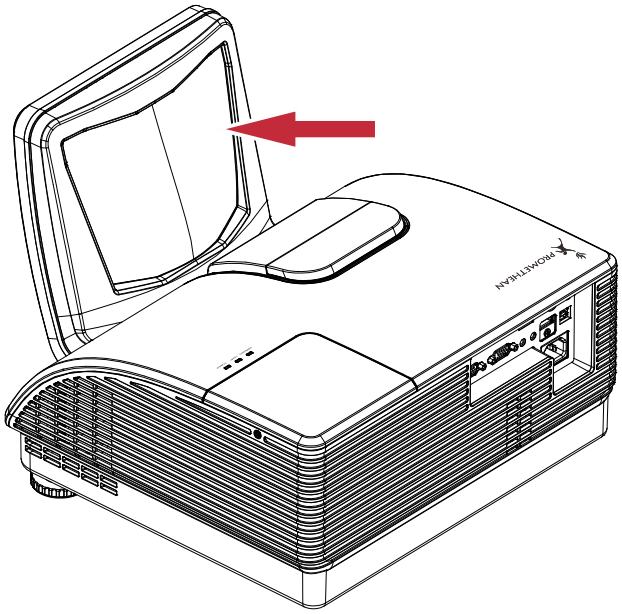
6. Press the **MENU** button to get back to Installation II.



Cleaning the Projector

Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

Cleaning the Projector Mirror:



1. Remove dust with a “Bellows/Lens Blower” readily available from Camera shops to prevent scratching the mirror when subsequently wiped.
2. Gently wipe with a lens cleaning cloth or alternatively, use a lens cleaning tissue in conjunction with a small amount of lens cleaning fluid.

Cautions:

1. *Always turn the projector off and allow to cool for at least 30 minutes prior to cleaning.*

2. *Never touch the projector mirror or Lens directly by hand.*

3. *Do not use hard fibre cloths.*

4. *Do not use abrasive cleaners, solvents or other harsh chemical cleaners.*

Cleaning the Case

Refer to the following to clean the projector case.

1. Wipe off dust with a clean dampened cloth.
2. Moisten the cloth with warm water and mild detergent (such as used to wash dishes), and then wipe the case.
3. Rinse all detergent from the cloth and wipe the projector again.

Caution:
To prevent discoloration or fading of the case, do not use abrasive alcohol-based cleaners.

Warning:

1. *Be sure to turn off and unplug the projector at least 30 minutes before cleaning. Failure to do so could result in a severe burn.*

2. *Use only a dampened cloth when cleaning. Do not allow water to enter the ventilation openings on the projector.*

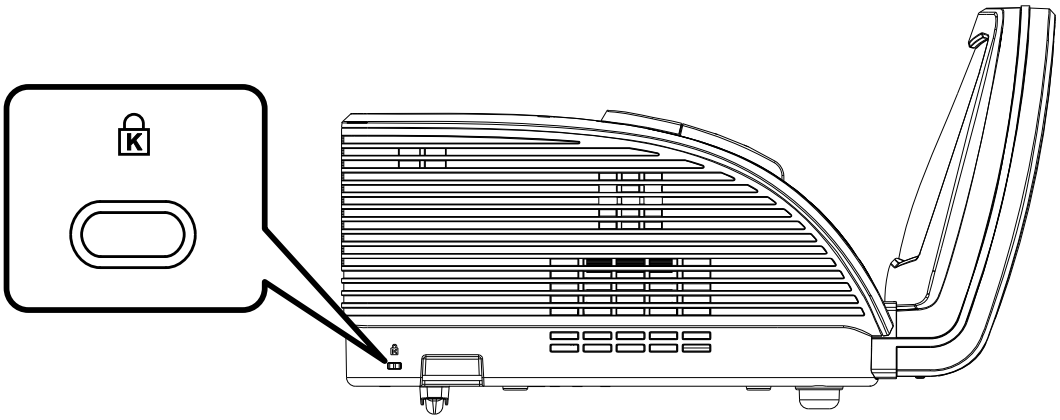
3. *If a little water gets into the projector interior while cleaning, leave unplugged in a well-ventilated room for several hours before using.*

4. *If a lot of water gets into the projector interior when cleaning, have the projector serviced.*

Using the Physical Lock

Using the Kensington® Lock

If you are concerned about security, attach the projector to a permanent object with the Kensington slot and a security cable.



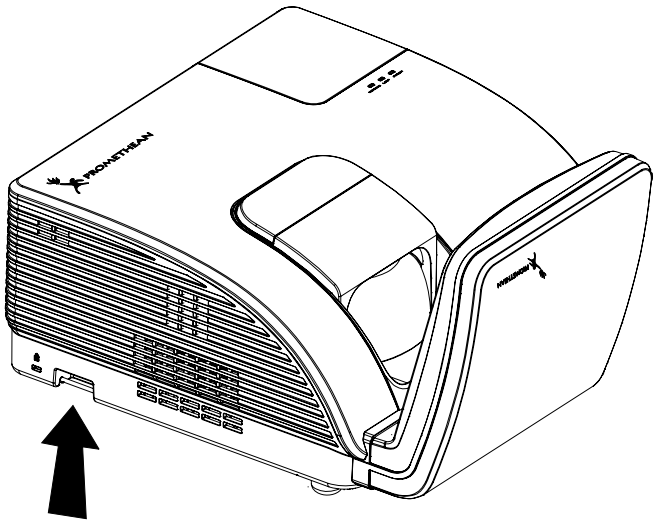
Note:
Contact your vendor for details on purchasing a suitable Kensington security cable.

The security lock corresponds to Kensington's MicroSaver Security System. If you have any comment, contact: Kensington, 2853 Campus Drive, San Mateo, CA 94403, U.S.A. Tel: 800-535-4242, http://www.Kensington.com.

Using the Security Bar

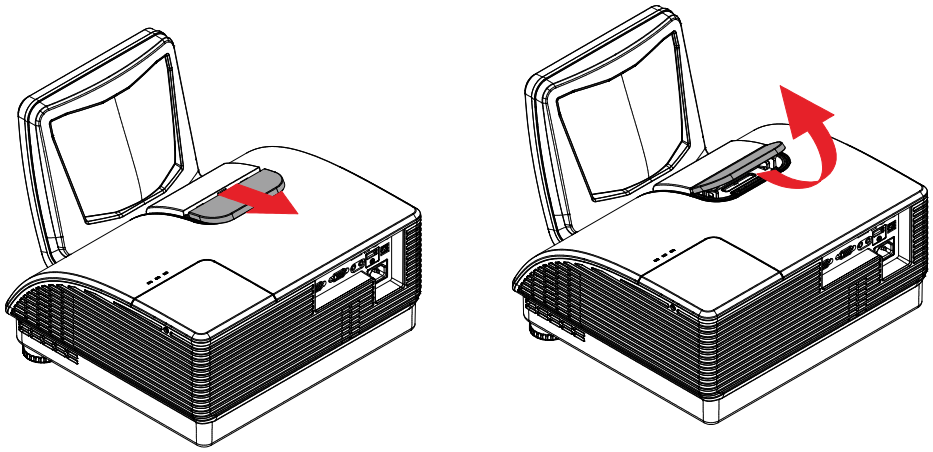
In addition to the password protection function and the Kensington lock, the Security Bar helps protect the EST-P1 from unauthorized removal.

See the following picture.



Adjusting the Focus

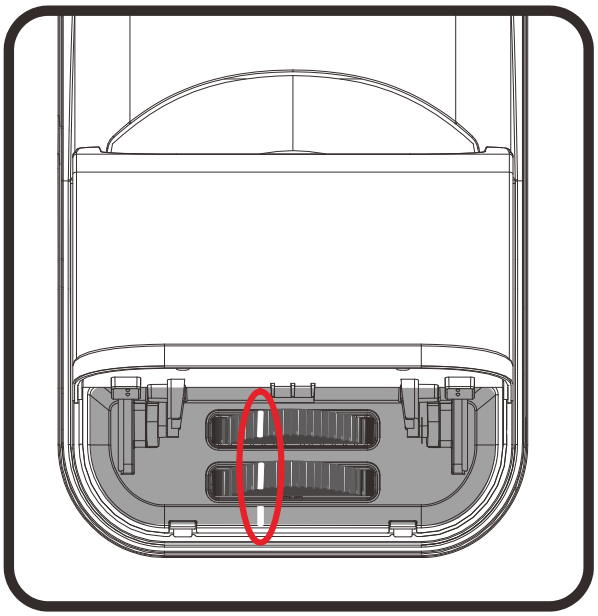
Open the Focus Cover in the direction as shown.



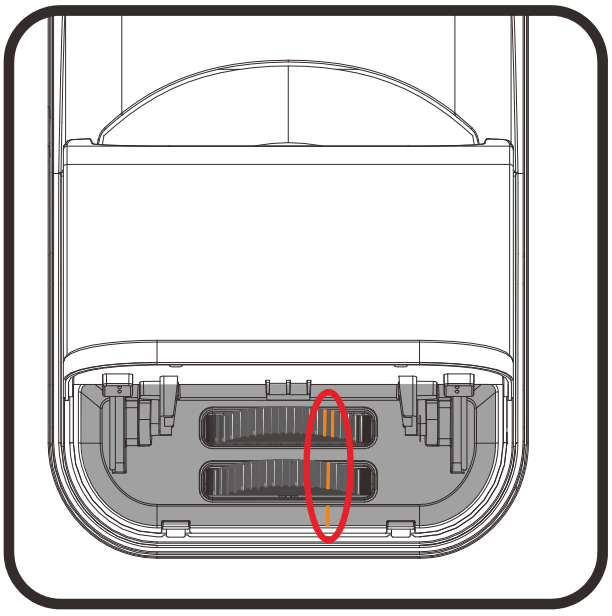
Focusing Procedure (I)

When alignment lines are clearly marked on the focus rings the following presets are available:

- For **87”** ActivBoard, adjust the focus rings until the **white lines** align

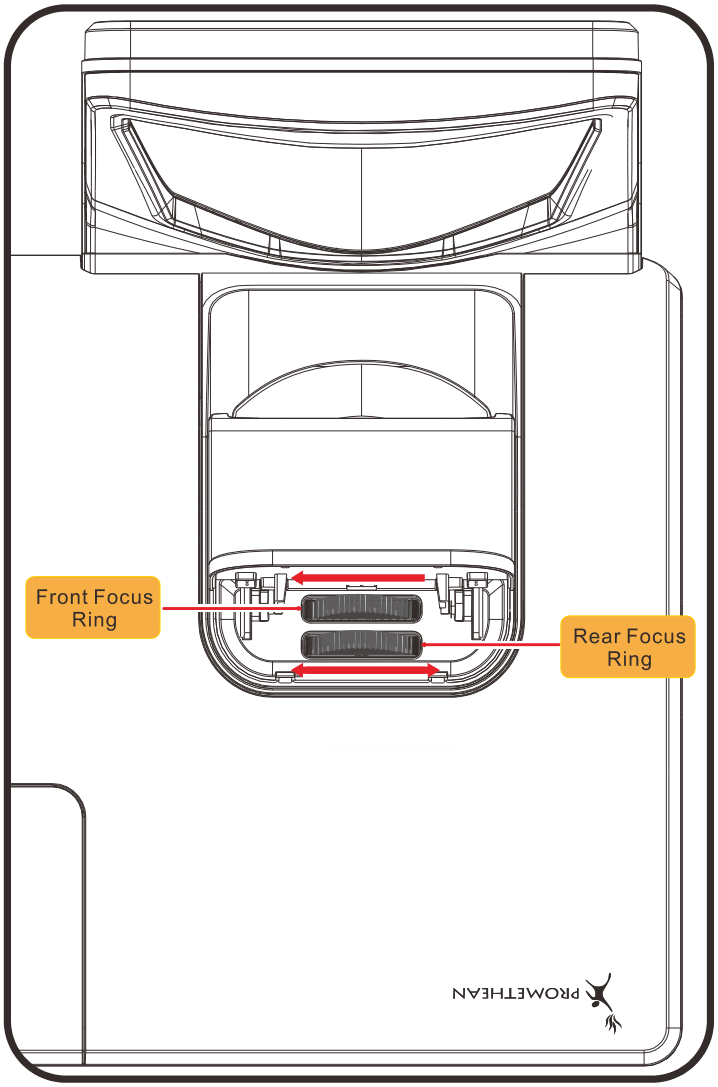


- For **95”** ActivBoard, adjust the focus rings until the **three orange lines** align



Focusing Procedure (II)

1. With the projector mounted and operator facing ActivBoard, turn the **Front Focus Ring** all the way to the left (opposite to PROMETHEAN logo).
2. Adjust the **Rear Focus Ring** to obtain the best overall focus of the image.
3. If unable to focus the whole image, turn the **Front Focus Ring** slightly to the right.
4. Again, adjust the **Rear Focus Ring** to obtain the best overall focus of the image.
5. If still unable to focus the whole image, turn the **Front Focus Ring** slightly to the right again.
6. Repeat steps 4 and 5 until an evenly focused image is obtained .



Common problems and solutions

These guidelines provide tips to deal with problems you may encounter while using the projector. If the problem remains unsolved, contact your dealer for assistance.

Often after time spent troubleshooting, the problem is traced to something as simple as a loose connection. Check the following before proceeding to the problem-specific solutions.

- *Use some other electrical device to confirm that the electrical outlet is working.*
- *Ensure the projector is turned on.*
- *Ensure all connections are securely attached.*
- *Ensure the attached device is turned on.*
- *Ensure a connected PC is not in suspending mode.*
- *Ensure a connected notebook computer is configured for an external display. (This is usually done by pressing a Fn-key combination on the notebook).*

Tips for Troubleshooting

In each problem-specific section, try the steps in the order suggested. This may help you to solve the problem more quickly.

Try to pin point the problem and thus avoid replacing non-defective parts.
For example, if you replace batteries and the problem remains, put the original batteries back and go to the next step.

Keep a record of the steps you take when troubleshooting: The information may be useful when calling for technical support or for passing on to service personnel.

LED Error Messages

Error Code Messages	Warning LED	Lamp LED Blink	Power LED Blink
Power On	0	0	Blue
Power Off	0	0	Orange
Lamp Fail	0	ON	OFF
Cooling	0	0	Flashing
Over Temperature	ON	0	0
T1 Error	0	1	3
T2 Error	0	2	3
Thermal Break Sensor error	0	0	4
Lamp Strike Fail	0	0	5
Ballast Fail	0	2	5
Ballast Over Temperature In Start	0	3	5
Ballast Over Temperature	0	4	5
Burner Fan error	0	1	6
Lamp Fan error	0	2	6
Lamp Door Open	0	0	7
DMD error	0	0	8
Color wheel error	0	0	9
Ballast Communication Fail	0	1	10

In the event of an error, please disconnect the AC power cord and wait for one (1) minute before re-starting the projector. If the POWER or LAMP LEDs are still blinking or the WARNING LED is lit, contact your service center.

Image Problems

Problem: No image appears on the screen

1. Verify the settings on your notebook or desktop PC.
2. Turn off all equipment and power up again in the correct order.

Problem: The image is blurred

1. Press the **Auto** button on the remote control or projector.
2. Ensure the projector-to-screen distance is within the 22.4±10mm (for 16:10 87") or 62.3+/- 10mm (for 16:9 95") specified range.
3. Check that the projector lens is clean.

Problem: The image is wider at the top or bottom (trapezoid effect)

1. Position the projector so it is as perpendicular to the screen as possible.
2. Use the **Keystone** button on the remote control or projector to correct the problem.

Problem: The image is reversed

Check the **Projection** setting on the **Installation I** menu of the OSD.

Problem: The image is streaked

1. Set the **Frequency** and **Tracking** settings on the **Computer** menu of the OSD to the default settings.
2. To ensure the problem is not caused by a connected PC's video card, connect to another computer.

Problem: The image is flat with no contrast

Adjust the **Contrast** setting on the **Image** menu of the OSD.

Problem: The color of the projected image does not match the source image.

Adjust the **Color Temperature** and **Gamma** settings on the **Image** menu of the OSD.

Lamp Problems

Problem: There is no light from the projector

1. Check that the power cable is securely connected.
1. Ensure the power source is good by testing with another electrical device.
2. Restart the projector in the correct order and check that the Power LED is orange.
3. If you have replaced the lamp recently, try resetting the lamp connections.
4. Replace the lamp module.
5. Put the old lamp back in the projector and have the projector serviced.

Problem: The lamp goes off

1. Power surges can cause the lamp to turn off. Re-plug power cord. When the POWER LED is on, press the power button.
2. Replace the lamp module.
3. Put the old lamp back in the projector and have the projector serviced.

Remote Control Problems

Problem: The projector does not respond to the remote control

1. Direct the remote control towards remote sensor on the projector.
2. Ensure the path between remote and sensor is not obstructed.
3. Turn off any fluorescent lights in the room.
4. Check the battery polarity.
5. Replace the batteries.
6. Turn off other Infrared-enabled devices in the vicinity.
7. Have the remote control serviced.

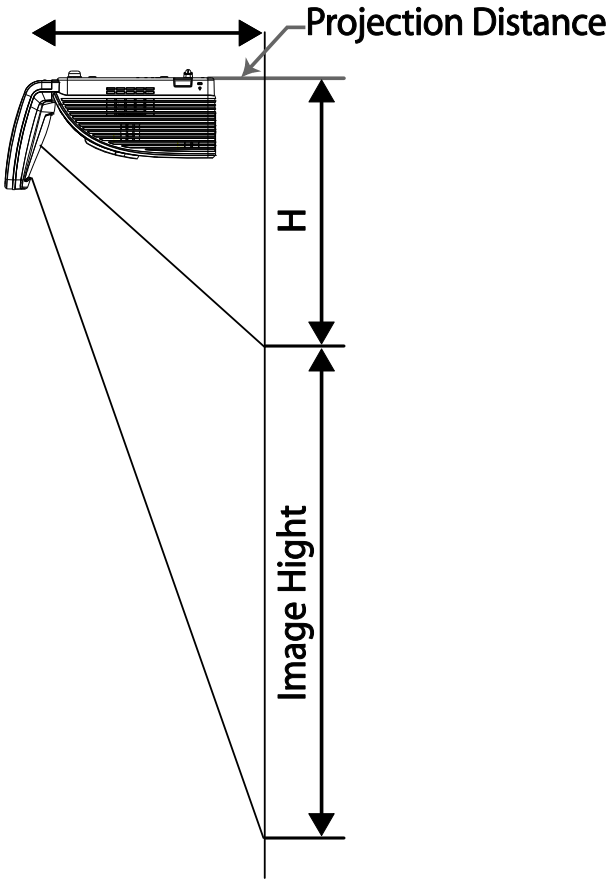
Having the Projector Serviced

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton. Include a description of the problem and a checklist of the steps you took when trying to fix the problem: The information may be useful to service personnel. For servicing, return the projector to the place you purchased it.

Specifications

Model	EST-P1 (EST-P1C, EST-P1V1, PEST-P1V2, EST-P1CV1, EST-P1CV2, EST-P1-G)	
Display type	TI DMD 0.65" WXGA	
Resolution	WXGA 1280 x 800 Native	
Weight	9 kg (19.8 lbs)	
Projection distance	22.4+/-10mm	62.3+/-10mm
Projection screen size (diago-nal)	16:10 (87")	16:9 (95")
Vertical keystone correction	+/- 15 degrees	
Projection methods	Front, Rear, Desktop/Ceiling (Rear, Front)	
Data compatibility	VGA, SVGA, XGA, SXGA, UXGA, Mac	
SDTV/EDTV/ HDTV	480i, 576i, 480p, 576p, 720p, 1080i, 1080p	
Video compatibility	NTSC/NTSC 4.43, PAL (B/G/H/I/M/N/60), SECAM	
H-Sync	15, 30 – 90 kHz	
V-Sync	43 – 85 Hz	
Safety certification	FCC-B, UL, CB, CE, CCC, KC, PSB, GOST, SASO, KUCAS, NOM	
Operation temperature	5° ~ 35°C	
Dimensions	354 mm (W) x 157 mm (H) x 319 mm (D)	
AC Input	AC Universal 100 ~ 240, Typical @ 110VAC (100~240)/+-10%	
Power consumption	290W	
Stand By	<0.5 watt	
Lamp	220W	
Input Terminals	VGA x 2	
	S-Video x 1	
	Composite Video x 1	
	HDMI x 1	
Output Terminals	VGA x 1 (Loop Thru only for VGA IN-1)	
Control Terminals	RS-232C	
	RJ45	
	USB (type B)	
Security	Kensington lock	

Projection Distance vs. Projection Size



EST-P1 Projection Distance and Size Table

EST-P1	WXGA		XGA
	16:9	16:10	4:3
Distance	62.3+/-10mm	22.4+/-10mm	40.2+/-10mm
Diagonal	95"	87"	77"
Image Width	2089mm	1868mm	1566mm
Image height	1175mm	1167mm	1175mm
H	440+/-50mm	342+/-50mm	380+/-50mm

EST-P1 Timing Mode Table

The projector can display several resolutions. The following table outlines the resolutions that can be displayed by the projector.

SIGNAL	RESOLUTION	H-SYNC (KHZ)	V-SYNC (HZ)	COMPOSITE / S-VIDEO	COMPONENT	RGB (ANALOG)	DVI/ HDMI (DIGITAL)
NTSC	—	15.734	60.0	O	—	—	—
PAL/SECAM	—	15.625	50.0	O	—	—	—
VESA	720 x 400	37.9	85.0	—	—	O	O
	640 x 480	31.5	60.0	—	—	O	O
	640 x 480	37.9	72.8	—	—	O	O
	640 x 480	37.5	75.0	—	—	O	O
	640 x 480	43.3	85.0	—	—	O	O
	800 x 600	35.2	56.3	—	—	O	O
	800 x 600	37.9	60.3	—	—	O	O
	800 x 600	46.9	75.0	—	—	O	O
	800 x 600	48.1	72.2	—	—	O	O
	800 x 600	53.7	85.1	—	—	O	O
	1024 x 768	48.4	60.0	—	—	O	O
	1024 x 768	56.5	70.1	—	—	O	O
	1024 x 768	60.0	75.0	—	—	O	O
	1024 x 768	68.7	85.0	—	—	O	O
	1280 x 800	49.7	59.8	—	—	O	O
	1280 x 1024	64.0	60.0	—	—	O	O
	1280 x 1024	80.0	75.0	—	—	O	O
	1280 x 1024	91.1	85.0	—	—	O	O
	1400 x 1050	65.3	60.0	—	—	O	O
	1600 x 1200	75.0	60	—	—	O	O
	1920 x 1200	74.6	60.0	—	—	O	O
Apple Macintosh	640 x 480	35.0	66.7	—	—	O	O
	832 x 624	49.7	74.5	—	—	O	O
	1024 x 768	60.2	74.9	—	—	O	O
	1152 x 870	68.7	75.1	—	—	O	O
SDTV	480i	15.734	60.0	—	O	—	O
	576i	15.625	50.0	—	O	—	O
EDTV	576p	31.3	50.0	—	O	—	O
	480p	31.5	60.0	—	O	—	O

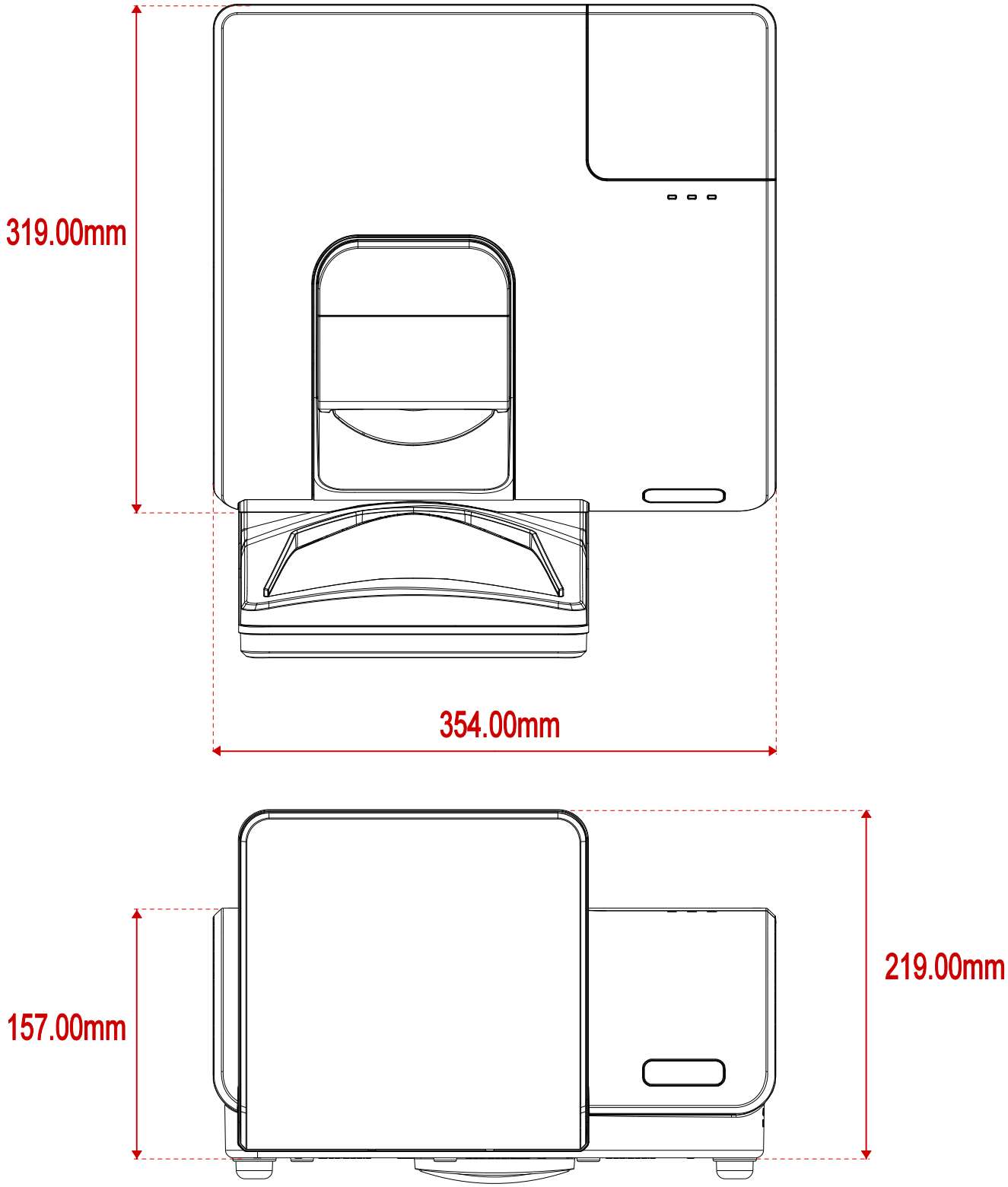
SIGNAL	RESOLUTION	H-SYNC (KHZ)	V-SYNC (HZ)	COMPOSITE / S-VIDEO	COMPONENT	RGB (ANALOG)	DVI/ HDMI (DIGITAL)
HDTV	720p	37.5	50.0	—	O	—	O
	720p	45.0	60.0	—	O	—	O
	1080i	33.8	60.0	—	O	—	O
	1080i	28.1	50.0	—	O	—	O
	1080p	27	24	—	O	—	O
	1080p	28	25	—	O	—	O
	1080p	33.7	30	—	O	—	O
	1080p	67.5	60.0	—	O	—	O
	1080p	56.3	50.0	—	O	—	O

O: Frequency supported

—: Frequency not supported

The resolution of the panel for the EST-P1 is 1280 x 800. Resolution other than native resolution may display with uneven size of text or lines.

Projector Dimensions



FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Changes or modifications not expressly approved by the parties responsible for compliance could void the user's authority to operate the equipment.

Canada

This class B digital apparatus complies with Canadian ICES-003.

Safety Certifications

FCC-B, UL, CB, CE, CCC, KC, GOST, SASO, KUCAS, NOM, and PSB